

=> fil reg; d que 19  
 FILE 'REGISTRY' ENTERED AT 10:08:27 ON 29 SEP 2004  
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STRUCTURE FILE UPDATES: 28 SEP 2004 HIGHEST RN 753424-73-6  
 DICTIONARY FILE UPDATES: 28 SEP 2004 HIGHEST RN 753424-73-6

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more  
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 to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

L8 ( 219)SEA FILE=REGISTRY ABB=ON ^D{0,1}[RK][V'NLE'] [Y'HSE'] [IAL]HPF{0  
 ,1}^/SQSP *^ marks beginning or end of sequence*  
 L9 200 SEA FILE=REGISTRY ABB=ON L8 AND SQL>6 *Seq must be 7 or 8 or longer*

=> fil capl; d que 148

FILE 'CAPLUS' ENTERED AT 10:08:28 ON 29 SEP 2004  
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FILE COVERS 1907 - 29 Sep 2004 VOL 141 ISS 14  
 FILE LAST UPDATED: 28 Sep 2004 (20040928/ED)

This file contains CAS Registry Numbers for easy and accurate  
 substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

L8 ( 219)SEA FILE=REGISTRY ABB=ON ^D{0,1}[RK][V'NLE'] [Y'HSE'] [IAL]HPF{0  
 ,1}^/SQSP  
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 L13 2131 SEA FILE=CAPLUS ABB=ON L9  
 L14 130893 SEA FILE=CAPLUS ABB=ON BONE#/OBI OR OSTEO?/OBI

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L16      995 SEA FILE=CAPLUS ABB=ON PAGET?/OBI
L23      27565 SEA FILE=CAPLUS ABB=ON BONE MARROW/CT
L30      53 SEA FILE=CAPLUS ABB=ON OSTEITIS/OBI(L) DEFORMANS/OBI
L31      7128 SEA FILE=CAPLUS ABB=ON PERIODONT?/OBI
L47      26127 SEA FILE=CAPLUS ABB=ON ARTHRITI?/OBI
L48      12 SEA FILE=CAPLUS ABB=ON ((L14 OR L16 OR (L30 OR L31) OR L47)
      AND L13) NOT L23

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*- Synonym for  
Paget's Disease of Bone*

=> fil uspatf; d que 150

FILE 'USPATFULL' ENTERED AT 10:08:28 ON 29 SEP 2004  
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 28 Sep 2004 (20040928/PD)  
FILE LAST UPDATED: 28 Sep 2004 (20040928/ED)  
HIGHEST GRANTED PATENT NUMBER: US6799328  
HIGHEST APPLICATION PUBLICATION NUMBER: US2004187181  
CA INDEXING IS CURRENT THROUGH 28 Sep 2004 (20040928/UPCA)  
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 28 Sep 2004 (20040928/PD)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2004  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2004

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>>> USPAT2 is now available. USPATFULL contains full text of the <<<
>>> original, i.e., the earliest published granted patents or <<<
>>> applications. USPAT2 contains full text of the latest US <<<
>>> publications, starting in 2001, for the inventions covered in <<<
>>> USPATFULL. A USPATFULL record contains not only the original <<<
>>> published document but also a list of any subsequent <<<
>>> publications. The publication number, patent kind code, and <<<
>>> publication date for all the US publications for an invention <<<
>>> are displayed in the PI (Patent Information) field of USPATFULL <<<
>>> records and may be searched in standard search fields, e.g., /PN, <<<
>>> /PK, etc. <<<

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>>> USPATFULL and USPAT2 can be accessed and searched together <<<
>>> through the new cluster USPATALL. Type FILE USPATALL to <<<
>>> enter this cluster. <<<
>>> <<<
>>> Use USPATALL when searching terms such as patent assignees, <<<
>>> classifications, or claims, that may potentially change from <<<
>>> the earliest to the latest publication. <<<

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This file contains CAS Registry Numbers for easy and accurate  
substance identification.

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L18     93 SEA FILE=USPATFULL ABB=ON L9
L19     10585 SEA FILE=USPATFULL ABB=ON (BONE# OR OSTEO? OR PAGET?)/IT
L21     2403 SEA FILE=USPATFULL ABB=ON (BONE MARROW)/IT
L33     1069 SEA FILE=USPATFULL ABB=ON (OSTEITIS(L) DEFORMANS OR PERIODONT?)
      /IT
L49     4659 SEA FILE=USPATFULL ABB=ON ARTHRITI?/IT
L50     7 SEA FILE=USPATFULL ABB=ON ((L19 OR L33 OR L49) AND L18) NOT
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=> fil medl cancer; d que 146

FILE 'MEDLINE' ENTERED AT 10:08:29 ON 29 SEP 2004

FILE 'CANCERLIT' ENTERED AT 10:08:29 ON 29 SEP 2004

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L38     344204 SEA "BONE AND BONES"+NT/CT
L39     12759 SEA OSTEOBLASTS+NT/CT
L40     7549 SEA OSTEOCLASTS/CT
L41     33531 SEA BONE REMODELING+NT/CT
L42     35623 SEA BONE DISEASES, METABOLIC+NT/CT
L43     25559 SEA OSTEOARTHRITIS+NT/CT
L44     3877 SEA OSTEITIS DEFORMANS/CT
L45     48829 SEA PERIODONTAL DISEASES+NT/CT
L46      0 SEA L29 AND (L38 OR L39 OR L40 OR L41 OR L42 OR L43 OR L44 OR
      L45)
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=> fil embase; d que l63

FILE 'EMBASE' ENTERED AT 10:08:30 ON 29 SEP 2004  
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FILE COVERS 1974 TO 24 Sep 2004 (20040924/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

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L53     96 SEA FILE=EMBASE ABB=ON L9
L54     194278 SEA FILE=EMBASE ABB=ON BONE+NT/CT
L55     38929 SEA FILE=EMBASE ABB=ON BONE TISSUE+NT/CT
L56     6103 SEA FILE=EMBASE ABB=ON BONE REMODELING/CT
L57     1753 SEA FILE=EMBASE ABB=ON BONE REGENERATION/CT
L58     39745 SEA FILE=EMBASE ABB=ON METABOLIC BONE DISEASE+NT/CT
L59     3487 SEA FILE=EMBASE ABB=ON PAGET BONE DISEASE/CT
L60      0 SEA FILE=EMBASE ABB=ON OSTEOHALISTER?
L61     16928 SEA FILE=EMBASE ABB=ON OSTEOARTHRITIS+NT/CT
L62     10034 SEA FILE=EMBASE ABB=ON PERIODONTAL DISEASE+NT/CT
L63      0 SEA FILE=EMBASE ABB=ON L53 AND (L54 OR L55 OR L56 OR L57 OR
      L58 OR L59 OR L60 OR L61 OR L62)
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=> fil prousddr; d que l64

FILE 'PROUSDDR' ENTERED AT 10:08:30 ON 29 SEP 2004  
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FILE COVERS 1980 TO 1 Sep 2004 (20040901/ED)

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L9 200 SEA FILE=REGISTRY ABB=ON L8 AND SQL>6  
L64 1 SEA FILE=PROUSDDR ABB=ON L9

=> fil adisinsight; d que 165

FILE 'ADISINSIGHT' ENTERED AT 10:08:31 ON 29 SEP 2004  
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FILE COVERS 1986 TO 23 Sep 2004 (20040923/ED)  
FILE LAST UPDATED: 23 SEP 2004 (20040923/ED)

L8 ( 219)SEA FILE=REGISTRY ABB=ON ^D{0,1}[RK][V'NLE'] [Y'HSE'] [IAL]HPF{0  
,1}^/SQSP  
L9 200 SEA FILE=REGISTRY ABB=ON L8 AND SQL>6  
L65 2 SEA FILE=ADISINSIGHT ABB=ON L9

=> fil DRUGU, AGRICOLA, BIOTECHNO, BIOSIS, TOXCENTER, ANABSTR, CAOLD; d que 152

FILE 'DRUGU' ENTERED AT 10:08:32 ON 29 SEP 2004  
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L8 ( 219)SEA FILE=REGISTRY ABB=ON ^D{0,1}[RK][V'NLE'] [Y'HSE'] [IAL]HPF{0  
,1}^/SQSP  
L9 200 SEA FILE=REGISTRY ABB=ON L8 AND SQL>6  
L25 570 SEA L9  
L26 684711 SEA BONE# OR OSTEO? OR PAGET?  
L27 271969 SEA BONE MARROW  
L36 31170 SEA (OSTEITIS(L) DEFORMANS OR PERIODONT?)  
L51 147361 SEA ARTHRITI?  
L52 9 SEA ((L26 OR L36 OR L51) AND L25) NOT L27

=> dup rem 148,152,150,164,165

DUPLICATE IS NOT AVAILABLE IN 'CAOLD, PROUSDDR, ADISINSIGHT'.  
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE  
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PROCESSING COMPLETED FOR L48  
PROCESSING COMPLETED FOR L52  
PROCESSING COMPLETED FOR L50  
PROCESSING COMPLETED FOR L64  
PROCESSING COMPLETED FOR L65

L66 26 DUP REM L48 L52 L50 L64 L65 (5 DUPLICATES REMOVED)  
ANSWERS '1-12' FROM FILE CAPLUS  
ANSWERS '13-18' FROM FILE TOXCENTER  
ANSWERS '19-23' FROM FILE USPATFULL  
ANSWER '24' FROM FILE PROUSDDR  
ANSWERS '25-26' FROM FILE ADISINSIGHT

=> d ibib ed abs hitseq 1-12; d iall 13-18; d ibib abs hitseq 19-23; d iall 24-26

L66 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2003:836574 CAPLUS

DOCUMENT NUMBER: 139:317472

TITLE: Methods, kits and compositions with angiotensinogen,  
angiotensin or AT2 angiotensin receptors for  
accelerating **bone** and cartilage growth and  
repair

INVENTOR(S): Rodgers, Kathleen E.; Dizerega, Gere S.

PATENT ASSIGNEE(S): The University of Southern California, USA

SOURCE: U.S. Pat. Appl. Publ., 23 pp., Cont.-in-part of U.S.  
6,258,778.  
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003199434	A1	20031023	US 2001-772819	20010130
US 6258778	B1	20010710	US 1999-352191	19990712
PRIORITY APPLN. INFO.:			US 1998-92653P	P 19980713
			US 1999-130855P	P 19990422
			US 1999-352191	A2 19990712

OTHER SOURCE(S): MARPAT 139:317472

ED Entered STN: 24 Oct 2003

AB The present invention provides improved methods, kits, and compns. for enhancing bone and cartilage repair, bone and prosthesis implantation, and attachment and fixation of cartilage to bone or other tissues; and methods, cell culture medium and kits for chondrocyte proliferation; all of which comprise the administration of an effective amt. of angiotensinogen, angiotensin I (AI), AI analogs, AI fragments and analogs thereof, angiotensin II (AII), AII analogs, AII fragments or analogs thereof or AII AT2 type 2 receptor agonists. AII and AII analog and

APPLIC

← ✓ out?

fragment peptides accelerated rabbit chondrocyte proliferation and accelerated the formation of new bone tissue in rats.

IT 4474-91-3 13602-53-4 39759-50-7  
51833-78-4 85734-57-2 209164-96-5  
209165-00-4 210982-24-4

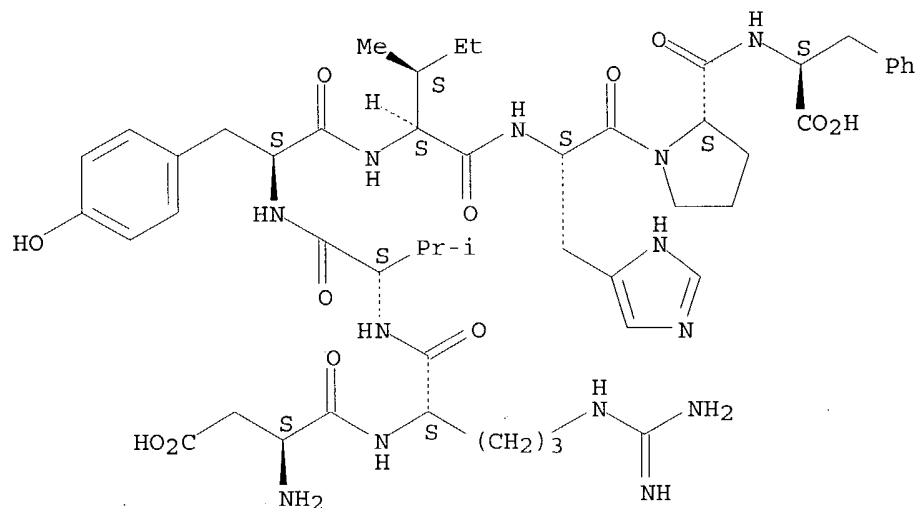
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(amino acid sequence; angiotensinogen, angiotensin or AT2 angiotensin receptors for accelerating bone and cartilage growth and repair)

RN 4474-91-3 CAPLUS

CN Angiotensin II, 5-L-isoleucine- (8CI, 9CI) (CA INDEX NAME)

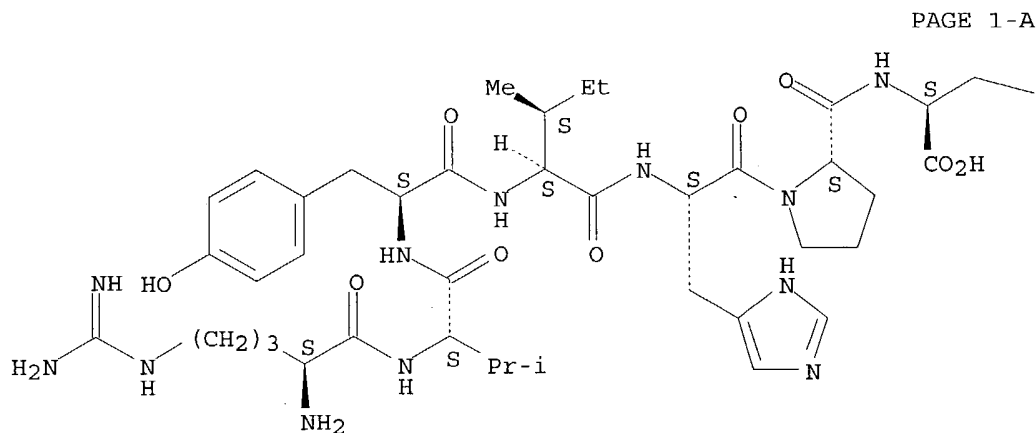
Absolute stereochemistry.



RN 13602-53-4 CAPLUS

CN Angiotensin III, 4-L-isoleucine- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



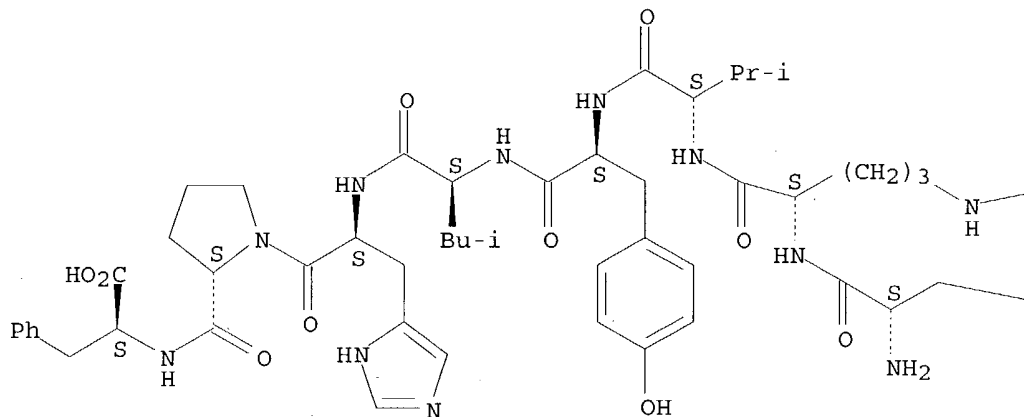
PAGE 1-B

Ph

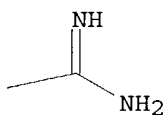
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CN Angiotensin II, 5-L-leucine- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

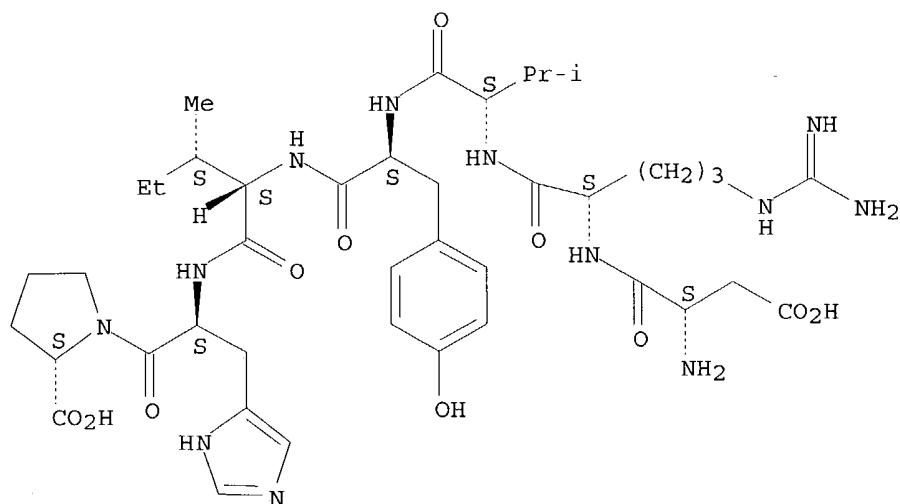


PAGE 1-B

 $\text{CO}_2\text{H}$ 

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NAME)

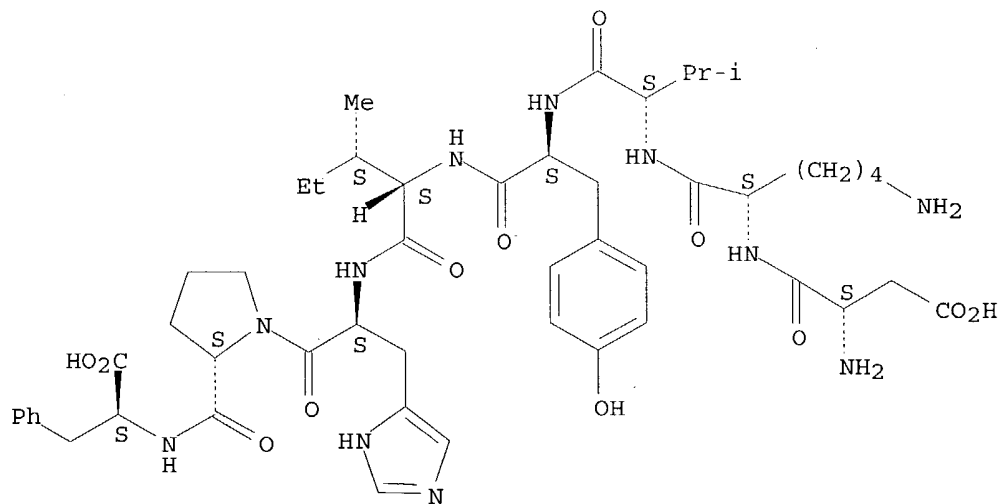
Absolute stereochemistry.



RN 85734-57-2 CAPLUS

CN Angiotensin II, 2-L-lysine-5-L-isoleucine- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



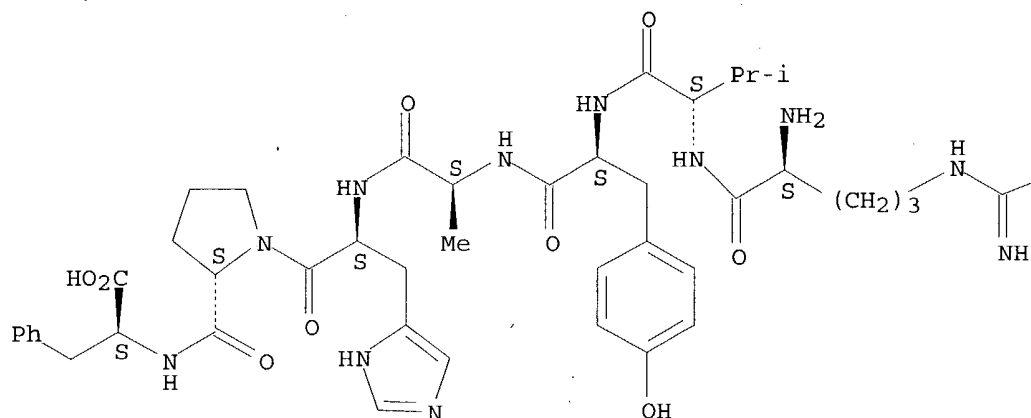
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CN Angiotensin III, 4-L-alanine- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



PAGE 1-A



PAGE 1-B

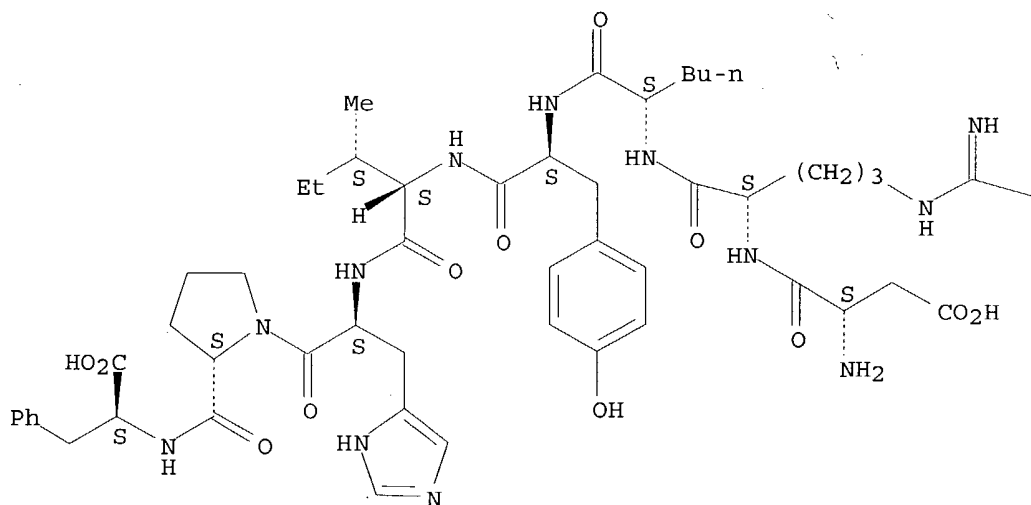
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RN 209165-00-4 CAPLUS

CN Angiotensin II, 3-L-norleucine-5-L-isoleucine- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

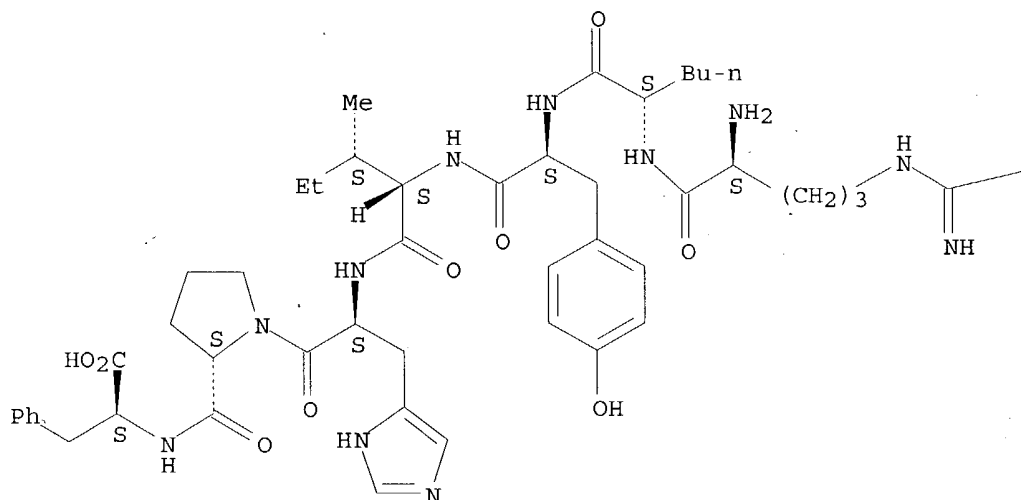
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RN 210982-24-4 CAPLUS

CN Angiotensin III, 2-L-norleucine-4-L-isoleucine- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

—NH<sub>2</sub>

IT 129785-85-9

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);  
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES  
 (Uses)

(amino acid sequence; att po3h2angiotensinogen, angiotensin or AT2  
 angiotensin receptors for accelerating **bone** and cartilage  
 growth and repair)

RN 129785-85-9 CAPLUS

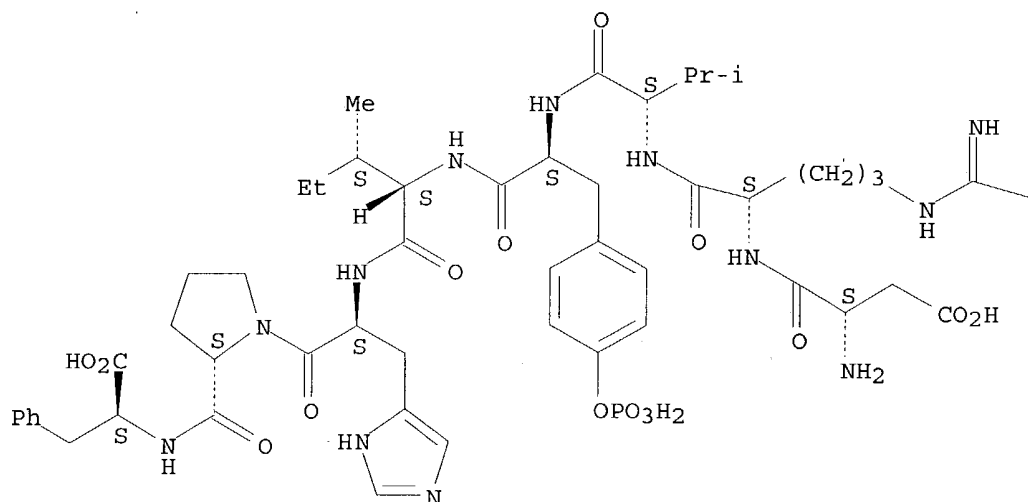
CN Angiotensin II, 5-L-isoleucine-, dihydrogen phosphate (ester) (9CI) (CA  
 INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 DRVYIHPF

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

NH<sub>2</sub>

L66 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2  
 ACCESSION NUMBER: 2001:449225 CAPLUS  
 DOCUMENT NUMBER: 135:58168  
 TITLE: Method for promoting mesenchymal stem and lineage-specific cell proliferation with angiotensin and analogs  
 INVENTOR(S): Rodgers, Kathleen E. Dizerega Gere  
 PATENT ASSIGNEE(S): University of Southern California, USA  
 SOURCE: U.S., 34 pp., Cont.-in-part of U.S. Ser. No. 12,400.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

APP.

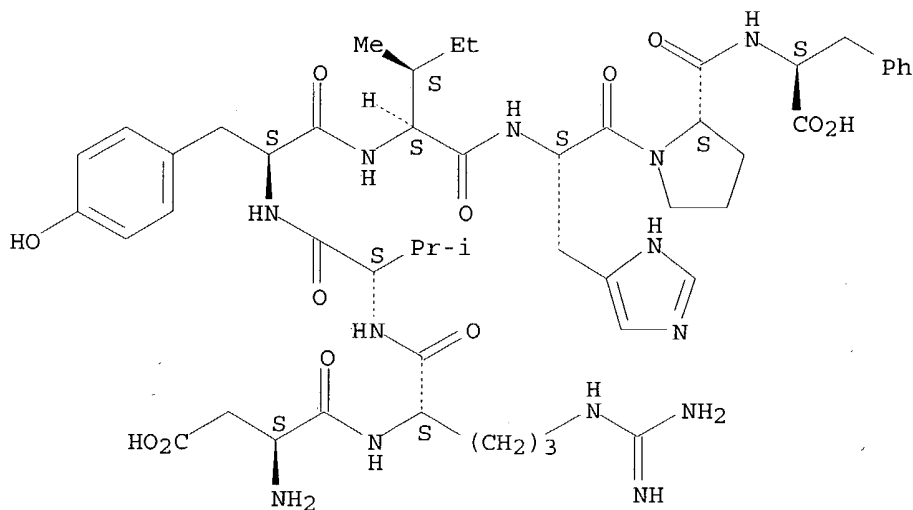
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 6248587 B1 20010619 US 1998-198806 19981124  
 US 6335195 B1 20020101 US 1998-12400 19980123  
 CA 2310852 AA 19990603 CA 1998-2310852 19981124  
 WO 9926644 A1 19990603 WO 1998-US25390 19981124  
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 DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE,  
 KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,  
 MX, NO, NZ, PL, PT, RQ, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,  
 TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,  
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,  
 CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 AU 9917063 A1 19990615 AU 1999-17063 19981124  
 EP 1047441 A1 20001102 EP 1998-961836 19981124  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, FI  
 JP 2002507383 T2 20020312 JP 2000-521846 19981124  
 US 2002146823 A1 20021010 US 2001-837697 20010418  
 PRIORITY APPLN. INFO.: US 1997-66593P P 19971126  
 US 1998-12400 A2 19980123  
 US 1997-36507P P 19970128  
 US 1997-46859P P 19970508  
 US 1997-63684P P 19971028  
 US 1997-63910P P 19971031  
 US 1997-65612P P 19971118  
 US 1998-198806 A1 19981124  
 WO 1998-US25390 W 19981124  
 OTHER SOURCE(S): MARPAT 135:58168  
 ED Entered STN: 21 Jun 2001  
 AB The present invention fulfills a need in the art for methods that promote  
 hematopoietic and mesenchymal stem and lineage-specific cell proliferation  
 and differentiation by growth in the presence of angiotensinogen,  
 angiotensin I (AI), AI analogs, AI fragments and analogs thereof,  
 angiotensin II (AII), AII analogs, AII fragments and analogs thereof and  
 AII AT2 type 2 receptor agonists.  
 IT 4474-91-3 13602-53-4 39759-50-7  
 51833-78-4 85734-57-2 209164-96-5  
 209165-00-4 210982-24-4  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
 study, unclassified); BUU (Biological use, unclassified); PRP  
 (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (amino acid sequence; method for promoting mesenchymal stem and  
 lineage-specific cell proliferation with angiotensin and analogs)  
 RN 4474-91-3 CAPLUS  
 CN Angiotensin II, 5-L-isoleucine- (8CI, 9CI) (CA INDEX NAME)

SEQ 1 DRVYIHPF

Absolute stereochemistry.



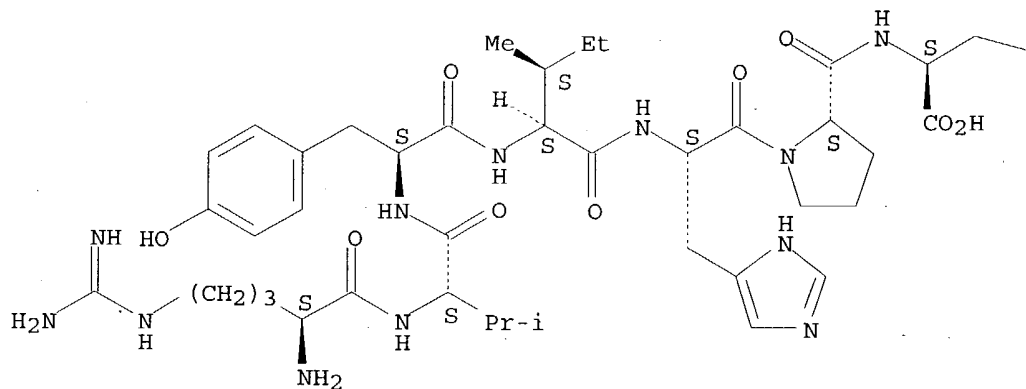
RN 13602-53-4 CAPLUS

CN Angiotensin III, 4-L-isoleucine- (9CI) (CA INDEX NAME)

SEQ 1 RVYIHPF

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

$$\text{--- Ph}$$

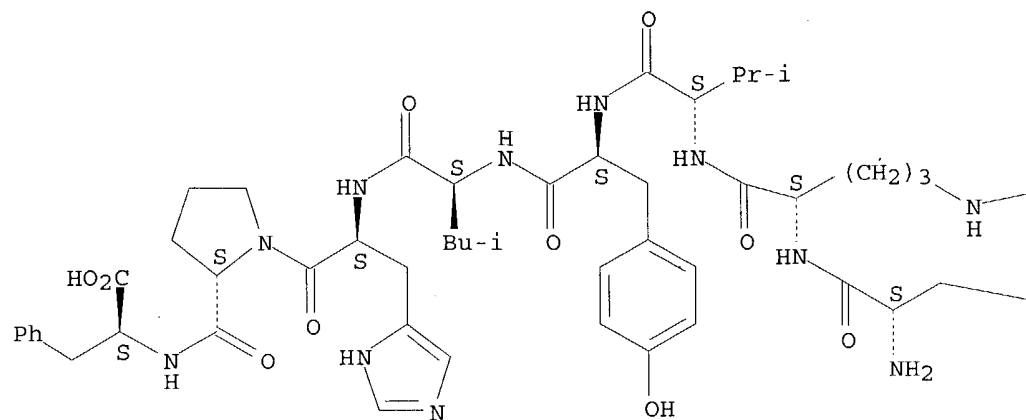
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CN	Angiotensin II, 5-L-leucine-	(9CI)	(CA INDEX NAME)
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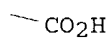
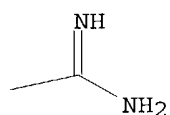
SEQ 1 DRVYLHPF

Absolute stereochemistry.

PAGE 1-A



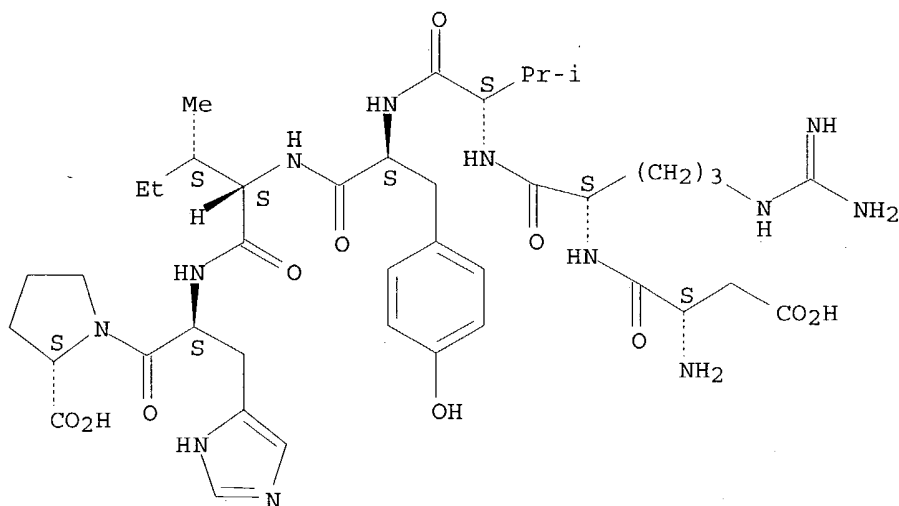
PAGE 1-B



RN 51833-78-4 CAPLUS  
CN Angiotensin II, 5-L-isoleucine-8-de-L-phenylalanine- (9CI) (CA INDEX NAME)

SEQ 1 DRVYIHP

Absolute stereochemistry.

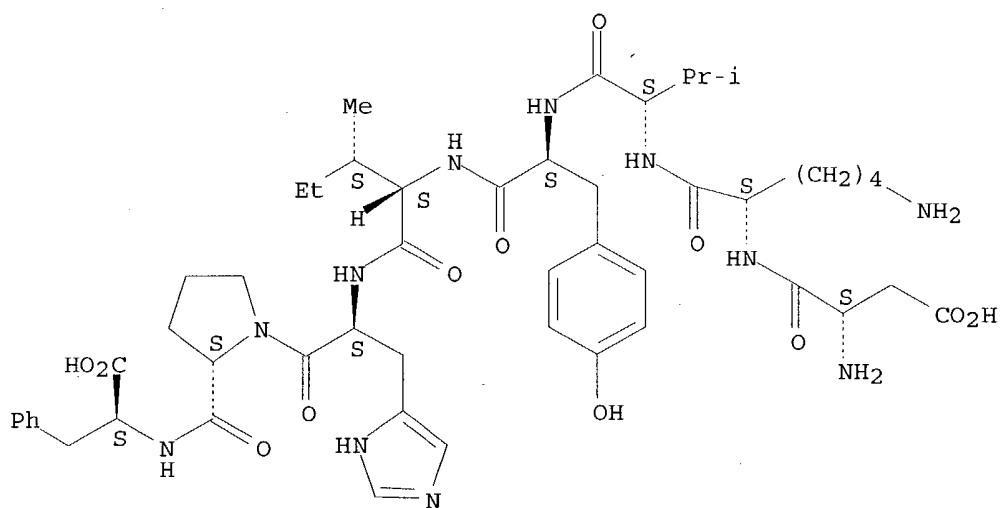


RN 85734-57-2 CAPLUS

CN	Angiotensin II, 2-L-lysine-5-L-isoleucine- (9CI)	(CA INDEX NAME)
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SEQ 1 DKVYIHPF

Absolute stereochemistry.



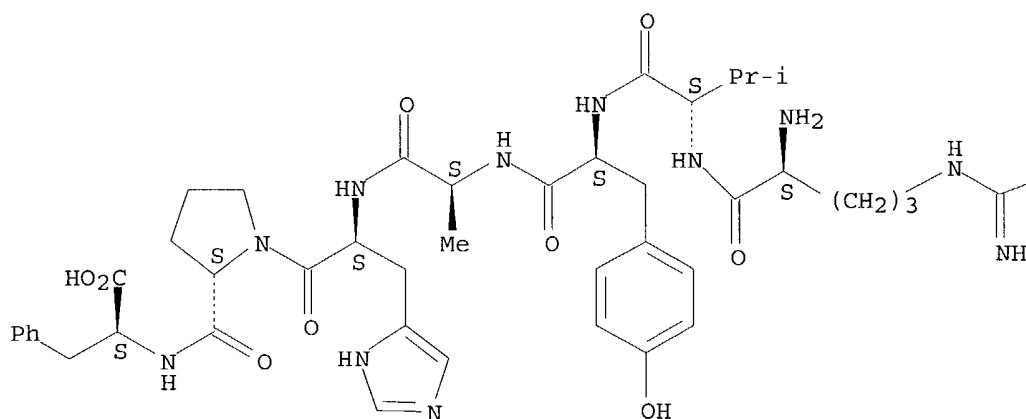
RN 209164-96-5 CAPLUS

CN Angiotensin III, 4-L-alanine- (9CI) (CA INDEX NAME)

SEQ 1 RVYAHPF

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

NH<sub>2</sub>

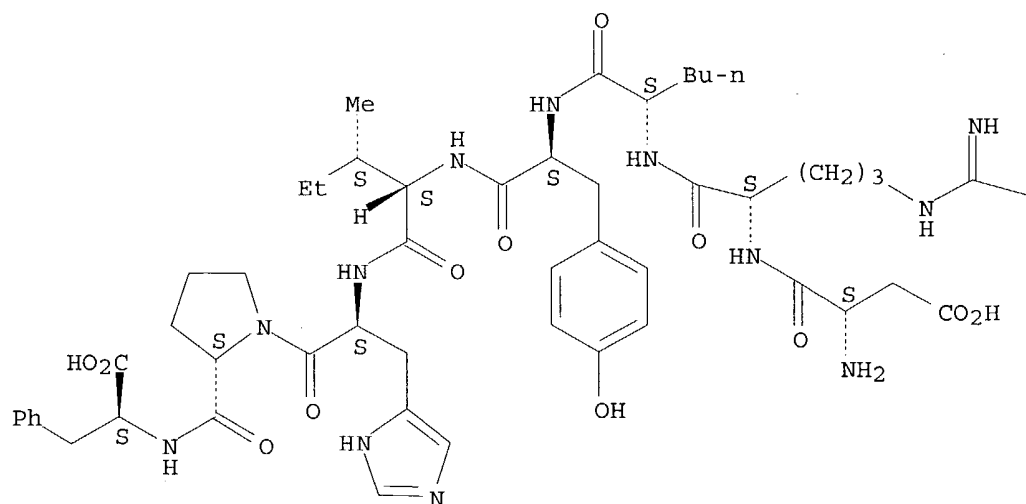
RN 209165-00-4 CAPLUS

CN Angiotensin II, 3-L-norleucine-5-L-isoleucine- (9CI) (CA INDEX NAME)

SEQ 1 DRXYIHPF

Absolute stereochemistry.

PAGE 1-A





PAGE 1-B

—NH<sub>2</sub>

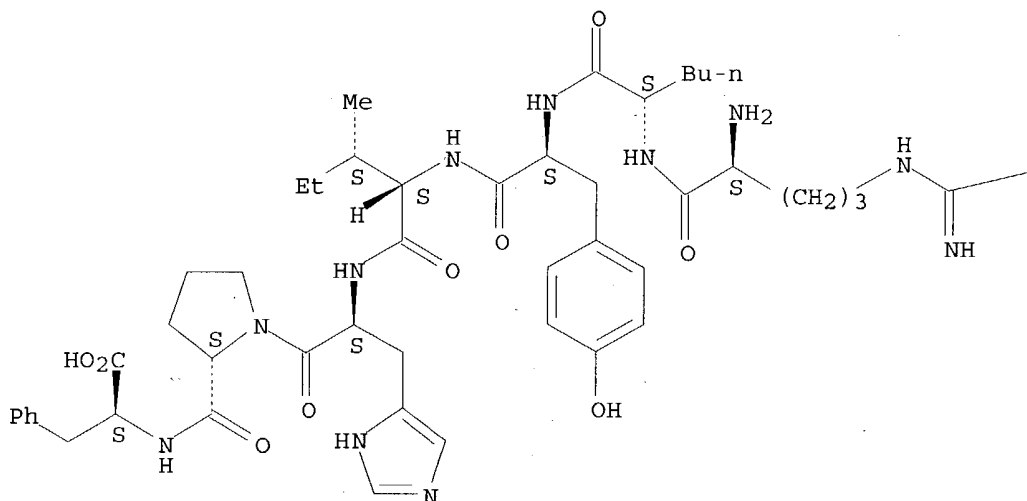
RN 210982-24-4 CAPLUS

CN Angiotensin III, 2-L-norleucine-4-L-isoleucine- (9CI) (CA INDEX NAME)

SEQ 1 RXYIHPF

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

—NH<sub>2</sub>

REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 3 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3

ACCESSION NUMBER: 2001:749037 CAPLUS  
DOCUMENT NUMBER: 136:52333  
TITLE: Hypokalemia induces renal injury and alterations in  
vasoactive mediators that favor salt sensitivity  
AUTHOR(S): Suga, Shin-Ichi; Phillips, M. Ian; Ray, Patricio E.;  
Raleigh, James A.; Vio, Carlos P.; Kim, Yoon-Goo;  
Mazzali, Marilda; Gordon, Katherine L.; Hughes,  
Jeremy; Johnson, Richard J.  
CORPORATE SOURCE: Division of Nephrology, University of Washington  
Medical Center, Seattle, WA, 98195, USA  
SOURCE: American Journal of Physiology (2001), 281(4, Pt. 2),  
F620-F629  
CODEN: AJPHAP; ISSN: 0002-9513  
PUBLISHER: American Physiological Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English

ED Entered STN: 14 Oct 2001

AB We investigated the hypothesis that hypokalemia might induce renal injury via a mechanism that involves subtle renal injury and alterations in local vasoactive mediators that would favor sodium retention. To test this hypothesis, we conducted studies in rats with diet-induced K<sup>+</sup> deficiency. We also detd. whether rats with hypokalemic nephropathy show salt sensitivity. Twelve weeks of hypokalemia resulted in a decrease in creatinine clearance, tubulointerstitial injury with macrophage infiltration, interstitial collagen type III deposition, and an increase in osteopontin expression (a tubular marker of injury). The renal injury was greatest in the outer medulla with radiation into the cortex, suggestive of an ischemic etiol. Consistent with this hypothesis, we found an increased uptake of a hypoxia marker, pimonidazole, in the cortex. The intrarenal injury was assocd. with increased cortical angiotensin-converting enzyme (ACE) expression and continued cortical angiotensin II generation despite systemic suppression of the renin-angiotensin system, an increase in renal endothelin-1, a decrease in renal kallikrein, and a decrease in urinary nitrite/nitrates and prostaglandin E<sub>2</sub> excretion. At 12 wk, hypokalemic rats were placed on a normal-K<sup>+</sup> diet with either high (4%) - or low (0.01%) -NaCl content. Despite correction of hypokalemia and normalization of renal function, previously hypokalemic rats showed an elevated blood pressure in response to a high-salt diet compared with normokalemic controls. Hypokalemia is assocd. with alterations in vasoactive mediators that favor intrarenal vasoconstriction and an ischemic pattern of renal injury. These alterations may predispose the animals to salt-sensitive hypertension that manifests despite normalization of the serum K<sup>+</sup>.

IT 4474-91-3

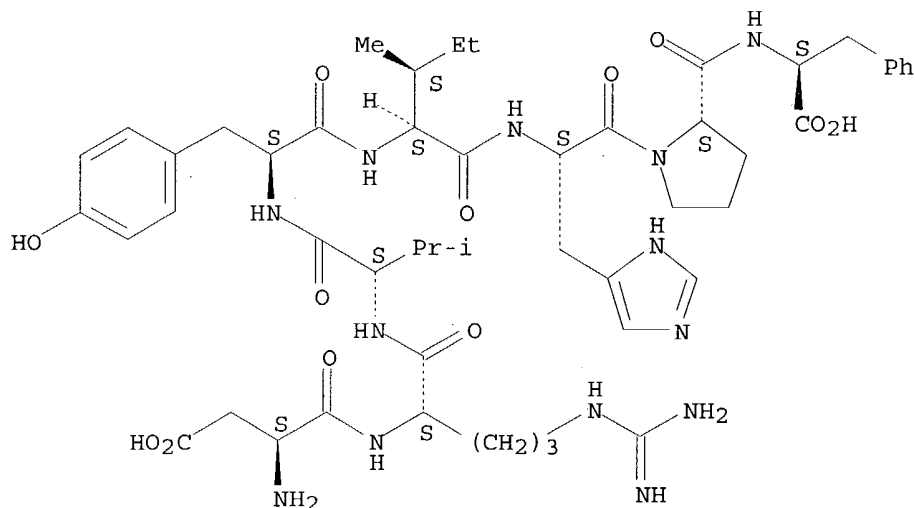
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(hypokalemia induces renal injury and alterations in vasoactive  
mediators that favor salt sensitivity)

RN 4474-91-3 CAPLUS

CN Angiotensin II, 5-L-isoleucine- (8CI, 9CI) (CA INDEX NAME)

SEQ 1 DRVYIHPF

Absolute stereochemistry.



REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 4 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 4

ACCESSION NUMBER: 2000:824291 CAPLUS

DOCUMENT NUMBER: 134:21425

TITLE: Protection of endogenous therapeutic peptides from  
peptidase activity through conjugation to blood  
components

INVENTOR(S) : Bridon, Dominique P.; Ezrin, Alan M.; Milner, Peter  
G.; Holmes, Darren L.; Thibault, Karen

PATENT ASSIGNEE(S) : Conjuchem, Inc., Can.

SOURCE: PCT Int. Appl., 733 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE : English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000069900	A2	20001123	WO 2000-US13576	20000517
WO 2000069900	A3	20010215		
WO 2000069900	C2	20020704		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,  
CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,  
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,  
MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,  
SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,  
AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,  
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,  
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

WO 2000070665	A2	20001123	WO 2000-IB763	20000517
WO 2000070665	A3	20010419		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,  
CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,  
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,  
MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,  
SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ,

MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,  
 IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML,  
 MR, NE, SN, TD, TG

EP 1105409 A2 20010613 EP 2000-936023 20000517  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO

EP 1171582 A2 20020116 EP 2000-929748 20000517  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO

EP 1264840 A1 20021211 EP 2002-14617 20000517  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL

JP 2003500341 T2 20030107 JP 2000-619018 20000517  
 JP 2003508350 T2 20030304 JP 2000-618316 20000517  
 AU 765753 B2 20030925 AU 2000-51393 20000517  
 US 6514500 B1 20030204 US 2000-657332 20000907  
 ZA 2001006676 A 20020719 ZA 2001-6676 20010814  
 ZA 2001009110 A 20020613 ZA 2001-9110 20011105  
 US 2003108567 A1 20030612 US 2002-287892 20021104  
 US 2003108568 A1 20030612 US 2002-288340 20021104  
 US 2004127398 A1 20040701 US 2003-722733 20031125  
 US 2004138100 A1 20040715 US 2003-723099 20031125

PRIORITY APPLN. INFO.:  
 US 1999-134406P P 19990517  
 US 1999-153406P P 19990910  
 US 1999-159783P P 19991015  
 EP 2000-932570 A3 20000517  
 WO 2000-IB763 W 20000517  
 WO 2000-US13576 W 20000517  
 US 2000-623548 A1 20000905  
 US 2000-657332 A3 20000907  
 US 2002-288340 A1 20021104

ED Entered STN: 24 Nov 2000

AB A method for protecting a peptide from peptidase activity in vivo, the peptide being composed of between 2 and 50 amino acids and having a C-terminus and an N-terminus and a C-terminus amino acid and an N-terminus amino acid is described. In the first step of the method, the peptide is modified by attaching a reactive group to the C-terminus amino acid, to the N-terminus amino acid, or to an amino acid located between the N-terminus and the C-terminus, such that the modified peptide is capable of forming a covalent bond in vivo with a reactive functionality on a blood component. The solid phase peptide synthesis of a no. of derivs. with 3-maleimidopropionic acid (3-MPA) is described. In the next step, a covalent bond is formed between the reactive group and a reactive functionality on a blood component to form a peptide-blood component conjugate, thereby protecting said peptide from peptidase activity. The final step of the method involves the analyzing of the stability of the peptide-blood component conjugate to assess the protection of the peptide from peptidase activity. Thus, the percentage of a K5 kringle peptide (Pro-Arg-Lys-Leu-Tyr-Asp-Lys-NH<sub>2</sub>) conjugated to human serum albumin via MPA remained relatively const. through a 24-h plasma assay in contrast to unmodified K5 which decreased to 9% of the original amt. of K5 in only 4 h in plasma.

IT 4474-91-3 13602-53-4 51833-78-4  
 RL: PRP (Properties)  
 (unclaimed sequence; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)

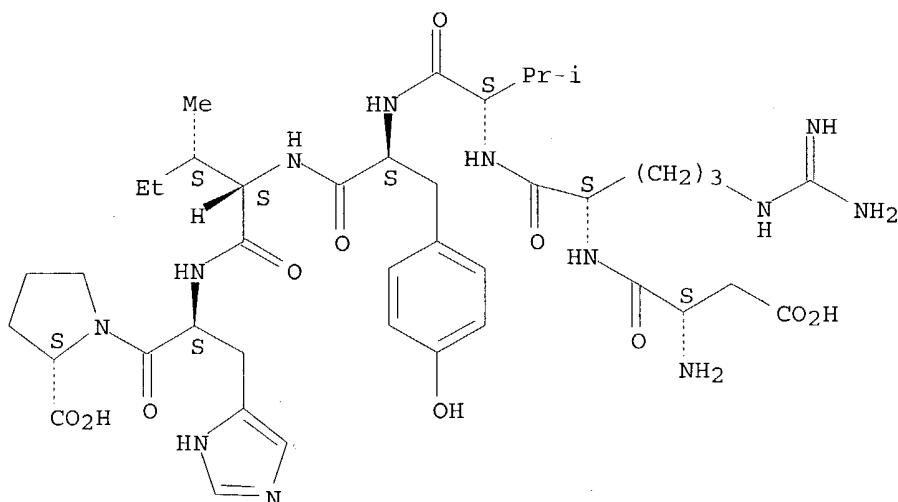
RN 4474-91-3 CAPLUS

CN Angiotensin II, 5-L-isoleucine- (8CI, 9CI) (CA INDEX NAME)

SEQ 1 DRVYIHPF



Absolute stereochemistry.



pressure-overload hypertrophy but was markedly increased (.apprxeq.8-fold) in banded rats with failure. Treatment with captopril starting before or after the onset of failure in the SHR reduced the increase in left ventricular osteopontin mRNA levels. Thus, osteopontin expression is markedly increased in the heart coincident with the development of heart failure. The source of osteopontin in SHR-F is primarily nonmyocytes, and its induction is inhibited by an angiotensin-converting enzyme inhibitor, suggesting a role for angiotensin II. Given the known biol. activities of osteopontin, including cell adhesion and regulation of inducible nitric oxide synthase gene expression, these data suggest that it could play a role in the pathophysiol. of heart failure.

IT 4474-91-3

RL: ADV (Adverse effect, including toxicity); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

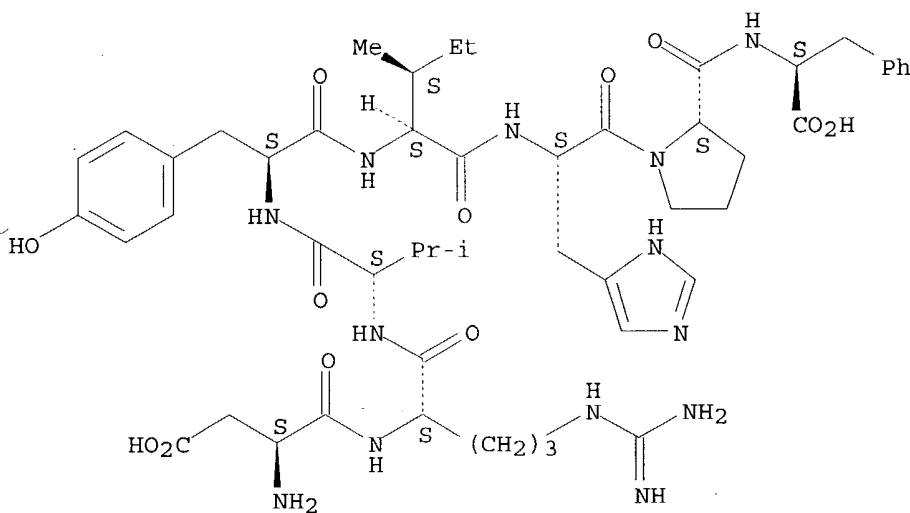
(osteopontin expression is markedly increased in heart coincident with development of heart failure)

RN 4474-91-3 CAPLUS

CN Angiotensin II, 5-L-isoleucine- (8CI, 9CI) (CA INDEX NAME)

SEQ 1 DRVYIHPF

Absolute stereochemistry.



REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 6 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:80664 CAPLUS

DOCUMENT NUMBER: 140:146172

TITLE: Preparation of substituted triazines as selective kinase inhibitors

INVENTOR(S): Kuo, Gee-hong; Deangelis, Alan; Wang, Aihua; Zhang, Yan; Emanuel, Stuart L.; Middleton, Steve A.

PATENT ASSIGNEE(S): Janssen Pharmaceutica, Nv, Belg.

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

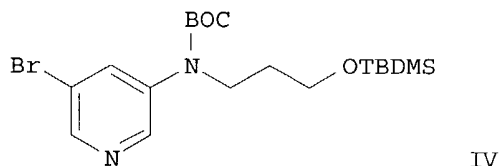
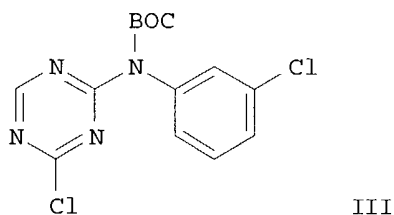
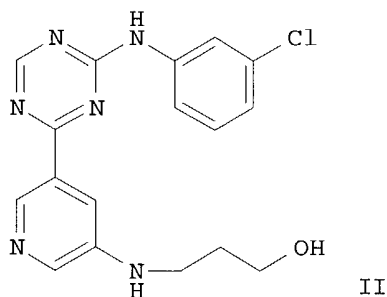
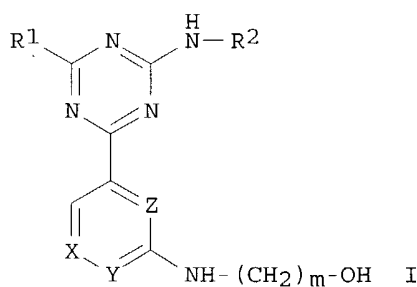
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004009562	A1	20040129	WO 2003-US22390	20030718
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2004082581	A1	20040429	US 2003-622721	20030718
PRIORITY APPLN. INFO.:			US 2002-396948P	P 20020718
OTHER SOURCE(S):			MARPAT 140:146172	
ED Entered STN: 01 Feb 2004				
GI				



AB The invention relates to substituted 1,3,5-triazines of formula I [wherein: X, Y, Z are selected from the group consisting of CH and N; R<sup>1</sup> = H, NH<sub>2</sub>; R<sup>2</sup> is mono-substituted Ph or 1,4-benzodioxinyl; m = 2-5] as selective kinase inhibitors useful in treatment of kinase mediated disorders. Covered biol. tests include CDK1 and VEGF-R screening assays, kinase selectivity assays, an assay to measure inhibition of cell proliferation (cell lines: HeLa, HCT-116, MDA-MB-231, PC-3, A375), etc. The tumor growth delay (TGD) method was used for evaluation of in vivo effect of I on the growth of human tumor cells in athymic mice, with a test compd. giving approx. 50% increase in MDS (mean day of survival) vs. control. For instance, compd. II (CDK1: IC<sub>50</sub> = 0.039 .mu.M; VEGF-R: IC<sub>50</sub> = 2.56 .mu.M) was prepd. via amination of 2,4-dichloro-1,3,5-triazine by N-Boc-3-chloroaniline, Pd-catalyzed cross-coupling reaction of obtained triazine III with pyridine deriv. IV, and hydrolysis.

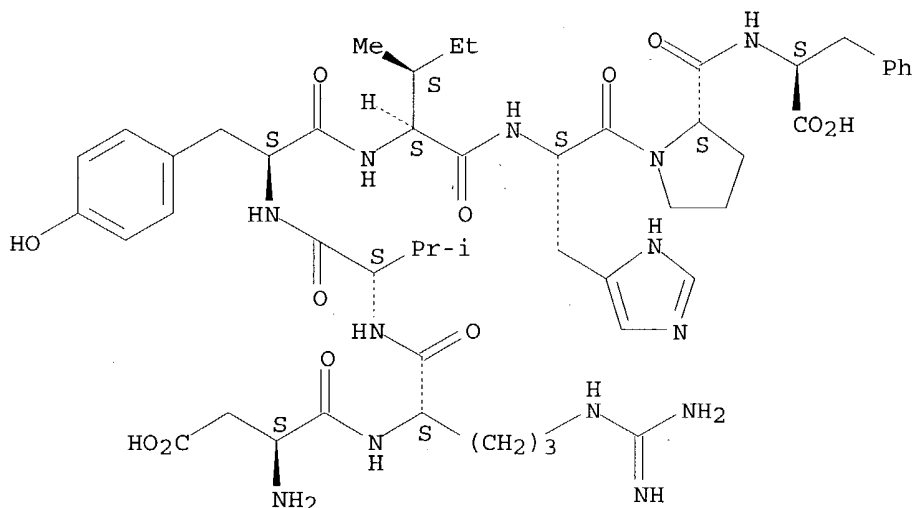
IT 4474-91-3



RN	4474-91-3	CAPLUS	
CN	Angiotensin II, 5-L-isoleucine-	(8CI, 9CI)	(CA INDEX NAME)

SEQ 1 DRVYIHPF

Absolute stereochemistry.



PATENT INFORMATION:

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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003072059	A2	20030904	WO 2003-US6007	20030227
WO 2003072059	A3	20031231		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW			

ML, MR, NE, SN, TD, TG

US 2003203834 A1 20031030 US 2003-375733 20030227  
PRIORITY APPLN. INFO.: US 2002-359847P P 20020227

ED Entered STN: 05 Sep 2003

AB The present invention describes the use of angiotensin-(1-7) peptide as an anti-cancer therapeutic. Thus, in one embodiment, the present invention comprises a compn. to inhibit the growth of cancer cells in an individual comprising a pharmaceutically effective amt. of an agonist for the angiotensin-(1-7) receptor to inhibit cancer cell growth or proliferation. Application of a pharmaceutically effective amt. of angiotensin-(1-7) or angiotensin-(1-7) receptor agonist is assocd. with an increase in the expression of genes involved in tumor suppression, apoptosis, and/or cell cycle inhibition, and a decrease the expression of known oncogenes, protein kinases, and/or cell cycle progression genes. Cancers treated using the methods and compns. described herein include cancers having an angiotensin-(1-7) receptor, including, but not limited to, breast and lung cancer.

IT 51833-78-4

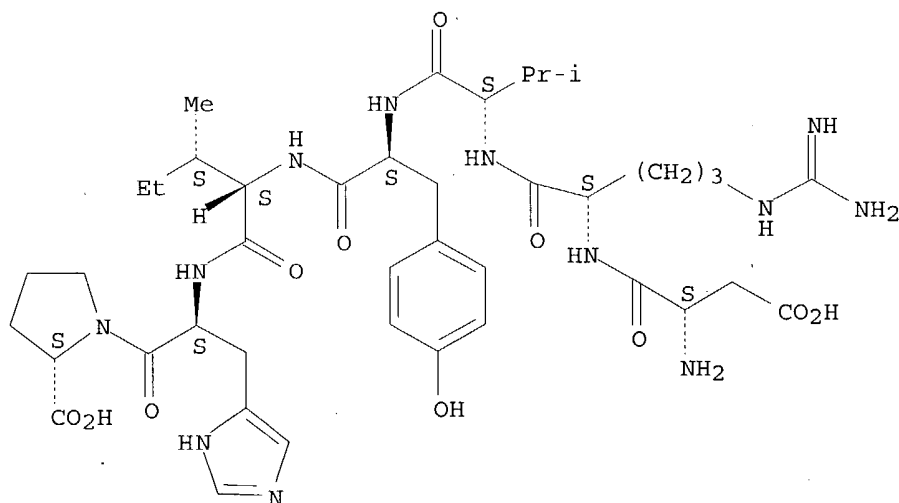
RL: BSU (Biological study, unclassified); DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(angiotensin (1-7) and angiotensin (1-7) receptor agonists for inhibition of cancer cell growth in relation to cellular effects and gene expression)

RN 51833-78-4 CAPLUS

CN Angiotensin II, 5-L-isoleucine-8-de-L-phenylalanine- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 4474-91-3 13602-53-4

RL: PRP (Properties)

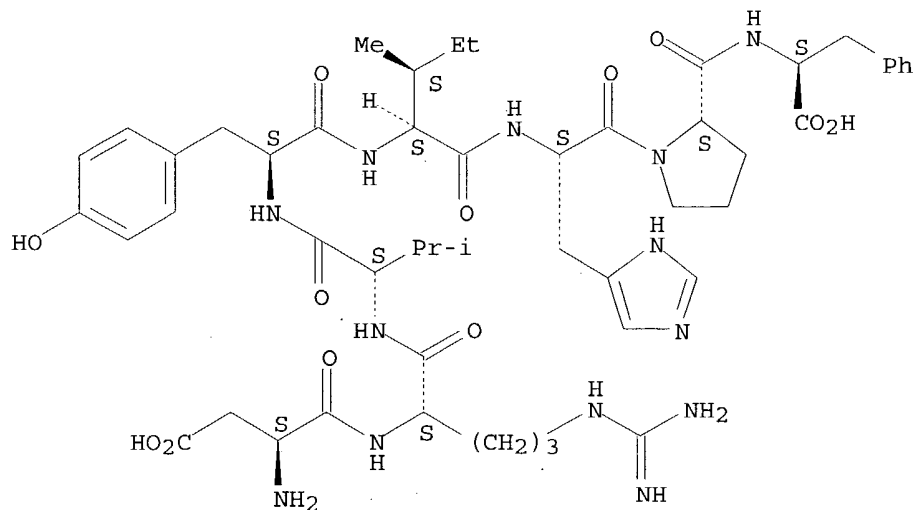
(unclaimed sequence; angiotensin-(1-7) and angiotensin-(1-7) agonists for inhibition of cancer cell growth)

RN 4474-91-3 CAPLUS

CN Angiotensin II, 5-L-isoleucine- (8CI, 9CI) (CA INDEX NAME)

SEQ 1 DRVYIHPF

Absolute stereochemistry.

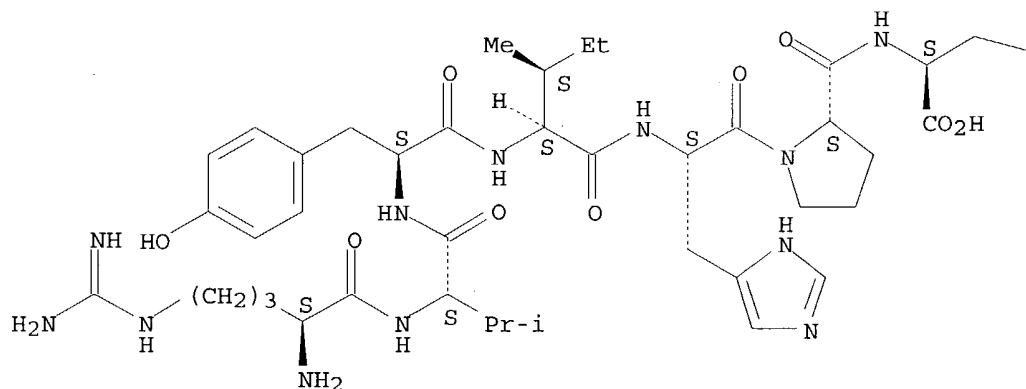


RN	13602-53-4	CAPLUS	
CN	Angiotensin III, 4-L-isoleucine-	(9CI)	(CA INDEX NAME)

SEQ 1 RVYIHPF

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

 $\text{—Ph}$ 

L66 ANSWER 8 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2000:144752 CAPLUS  
DOCUMENT NUMBER: 132:161695  
TITLE: Cancer treatment with an angiotensin  
INVENTOR(S): Vinson, Gavin Paul; Puddefoot, John Richard; Berry,  
Miles Gordon

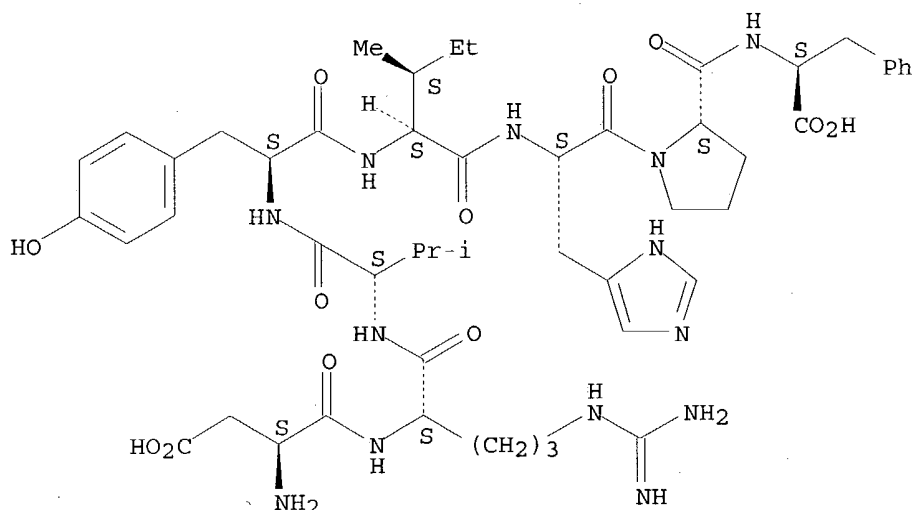
Searched by Barb O'Bryen, STIC 2-2518

PATENT ASSIGNEE(S): Queen Mary & Westfield College, UK  
 SOURCE: PCT Int. Appl., 30 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000010590	A2	20000302	WO 1999-GB2727	19990818
WO 2000010590	A3	20000518		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9954348	A1	20000314	AU 1999-54348	19990818
EP 1104305	A2	20010606	EP 1999-940353	19990818
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 2002119142	A1	20020829	US 2001-784005	20010216
PRIORITY APPLN. INFO.:			GB 1998-18023	A 19980818
			GB 1998-20000	A 19980914
			WO 1999-GB2727	W 19990818
ED	Entered STN: 03 Mar 2000			
AB	A method of treatment or prevention of metastasis of cancer cells comprises administration of an effective amt. of an angiotensin to a patient. The use of an angiotensin in the prepn. of a medicament for the prevention of metastasis of cancer cells is also described. A second aspect of the invention is a method of inducing expression of .beta.1-integrin mols. in cancer cells to prevent or treat metastasis by administering an effective amt. of an angiotensin.			
IT	4474-91-3 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (cancer metastasis treatment with angiotensin)			
RN	4474-91-3 CAPLUS			
CN	Angiotensin II, 5-L-isoleucine- (8CI, 9CI) (CA INDEX NAME)			

SEQ 1 DRVYIHPF

Absolute stereochemistry.



L66 ANSWER 9 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:53686 CAPLUS

DOCUMENT NUMBER: 132:103333

TITLE: Methods for accelerating **bone** and cartilage growth and repair using angiotensinogen, angiotensin I and II, their analogs or fragments, or AT2 receptor agonists

INVENTOR (S) : Rodgers, Kathleen Dizerega, Gere

PATENT ASSIGNEE(S): University of Southern California, USA

SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE : English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

APP.

~~1~~

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000002905	A2	20000120	WO 1999-US15735	19990712
WO 2000002905	A3	20000224		
W: AU, CA, JP, MX, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2328871	AA	20000120	CA 1999-2328871	19990712
CA 2328871	C	20021001		
AU 9949869	A1	20000201	AU 1999-49869	19990712
AU 756785	B2	20030123		
EP 1094829	A2	20010502	EP 1999-933921	19990712
EP 1094829	B1	20030924		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002520334	T2	20020709	JP 2000-559134	19990712
AT 250423	E	20031015	AT 1999-933921	19990712
ES 2207258	T3	20040516	ES 1999-933921	19990712
PRIORITY APPLN. INFO.:			US 1998-92653P	P 19980713
			US 1999-130855P	P 19990422
			WO 1999-US15735	W 19990712

OTHER SOURCE(S) : MARPAT 132:103333

ED Entered STN: 23 Jan 2000

AB The present invention provides improved methods, kits, and compns. for

enhancing bone and cartilage growth and repair, bone and prosthesis implantation, and attachment and fixation of cartilage and cartilage to bone or other tissues, and chondrocyte proliferation comprising the administration of an effective amt. of angiotensinogen, angiotensin I (AI), AI analogs, AI fragments and analogs thereof, angiotensin II (AII), AII analogs, AII fragments or analogs thereof or AII AT2 type 2 receptor agonists.

IT 4474-91-3 4474-91-3D, analogs and fragments  
13602-53-4, Angiotensin II (2-8) 39759-50-7  
85734-57-2 129785-85-9 209164-96-5  
209165-00-4 210982-24-4 227803-63-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

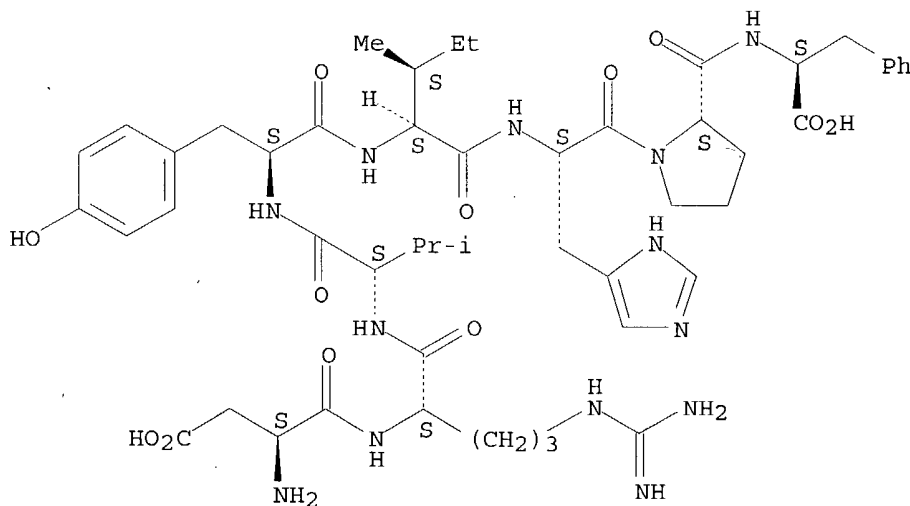
(methods for accelerating bone and cartilage growth and repair using angiotensinogen, angiotensin I and II, analogs or fragments, or AT2 receptor agonists)

RN 4474-91-3 CAPLUS

CN Angiotensin II, 5-L-isoleucine- (8CI, 9CI) (CA INDEX NAME)

SEQ 1 DRVYIHPF

Absolute stereochemistry.

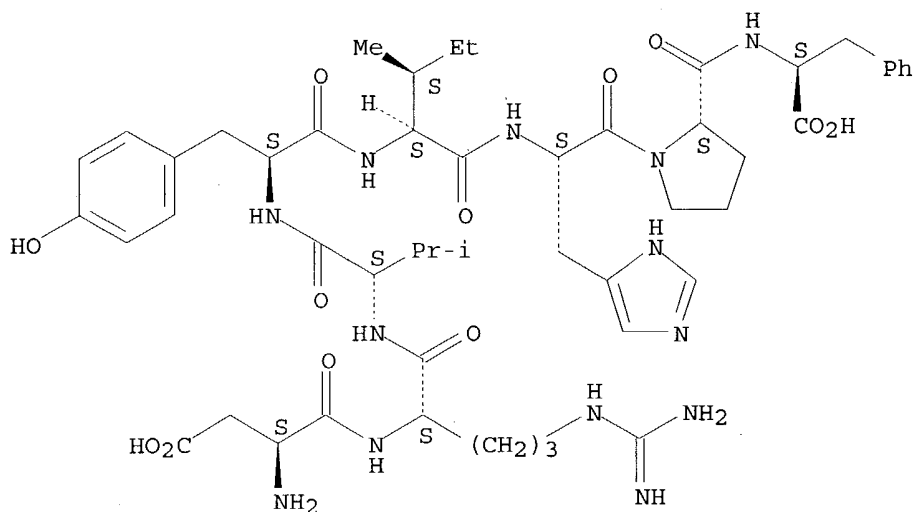


RN 4474-91-3 CAPLUS

CN Angiotensin II, 5-L-isoleucine- (8CI, 9CI) (CA INDEX NAME)

SEQ 1 DRVYIHPF

Absolute stereochemistry.



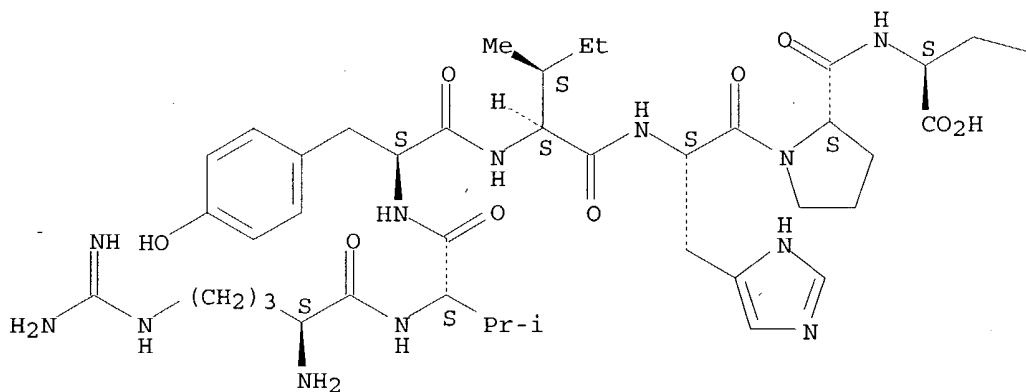
RN 13602-53-4 CAPLUS

CN Angiotensin III, 4-L-isoleucine- (9CI) (CA INDEX NAME)

SEQ 1 RVYIHPF

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

Ph

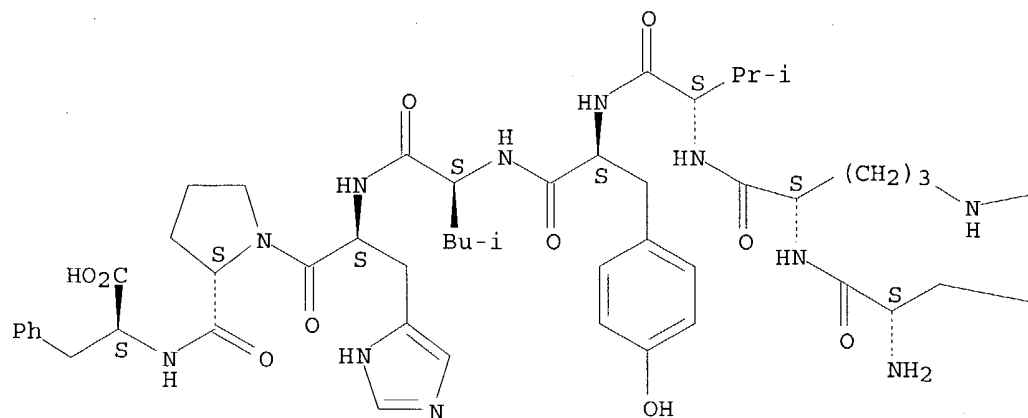
RN 39759-50-7 CAPLUS

CN Angiotensin II, 5-L-leucine- (9CI) (CA INDEX NAME)

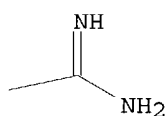
SEQ 1 DRVYLHPF

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



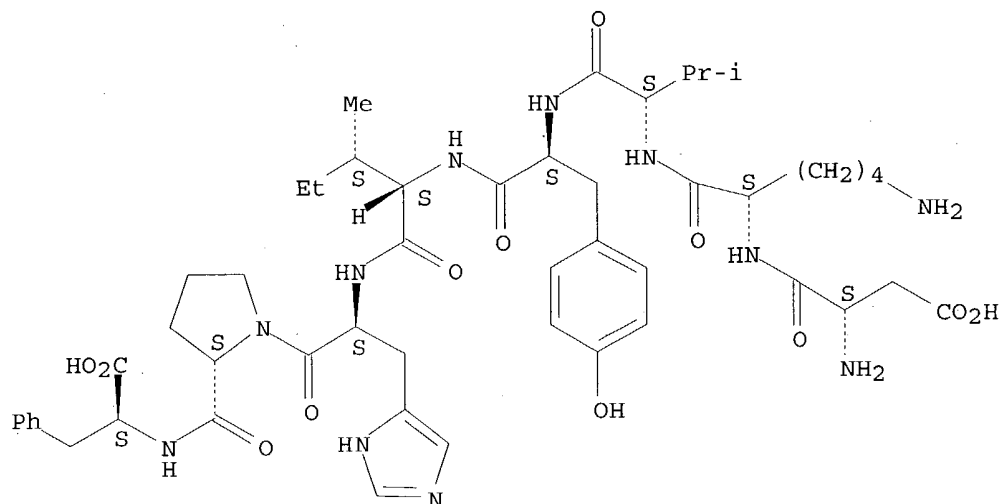
CO<sub>2</sub>H

RN 85734-57-2 CAPLUS  
CN Angiotensin II, 2-L-lysine-5-L-isoleucine- (9CI) (CA INDEX NAME)

SEQ 1 DKVYIHPF

Absolute stereochemistry.





RN 129785-85-9 CAPLUS

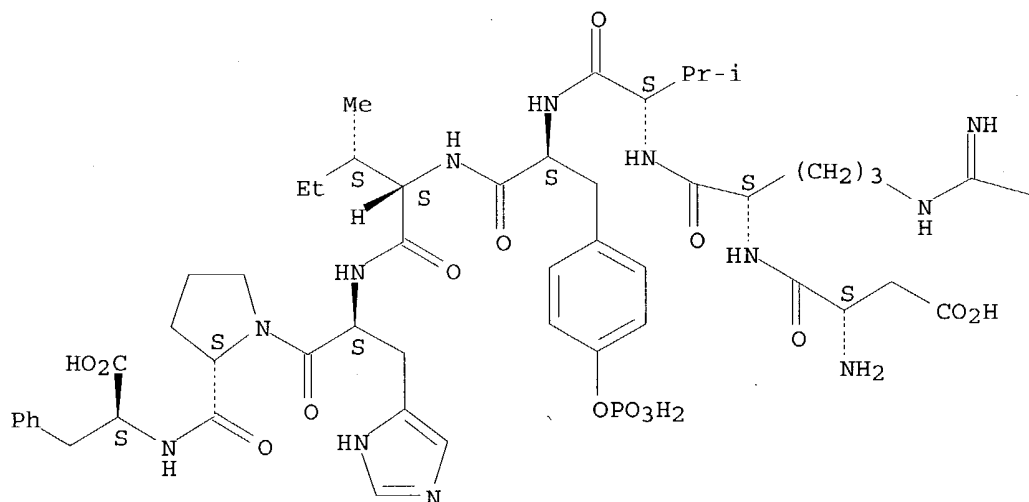
RN	129789-93-9	CHEBI:129789-93-9
CN	Angiotensin II, 5-L-isoleucine-, dihydrogen phosphate (ester) (9CI)	(CA 10600-10-4)
	INDEX NAME)	

NTE modified (modifications unspecified)

SEQ 1 DRVYIHPF

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

NH<sub>2</sub>

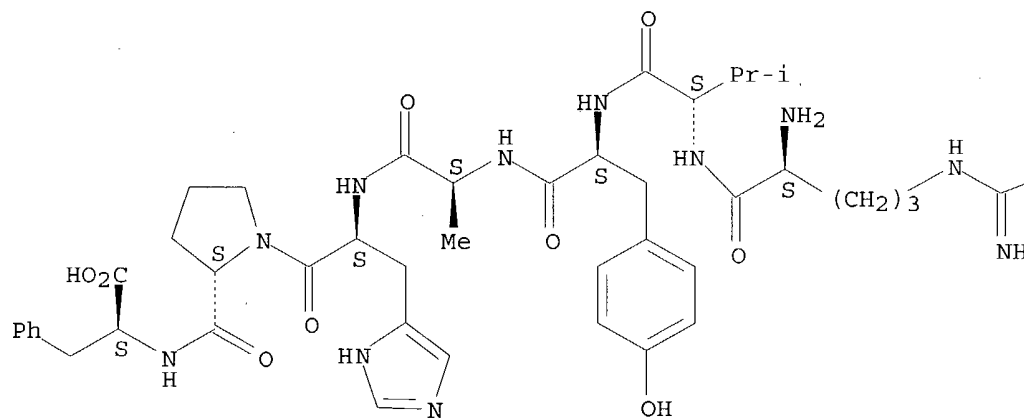
RN 209164-96-5 CAPLUS

CN Angiotensin III, 4-L-alanine- (9CI) (CA INDEX NAME)

SEQ 1 RVYAHPPF

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

NH<sub>2</sub>

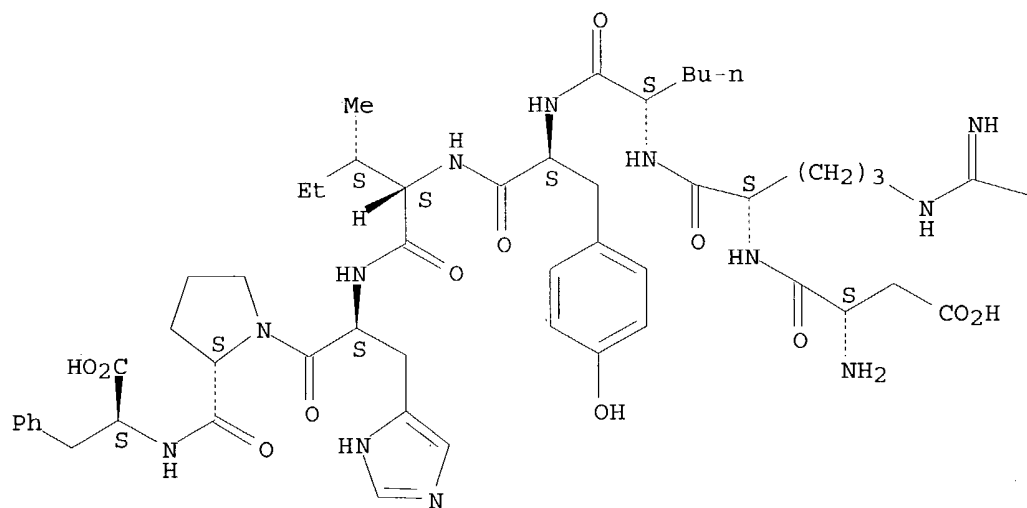
RN 209165-00-4 CAPLUS

CN Angiotensin II, 3-L-norleucine-5-L-isoleucine- (9CI) (CA INDEX NAME)

SEQ 1 DRXYIHPF

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

—NH<sub>2</sub>

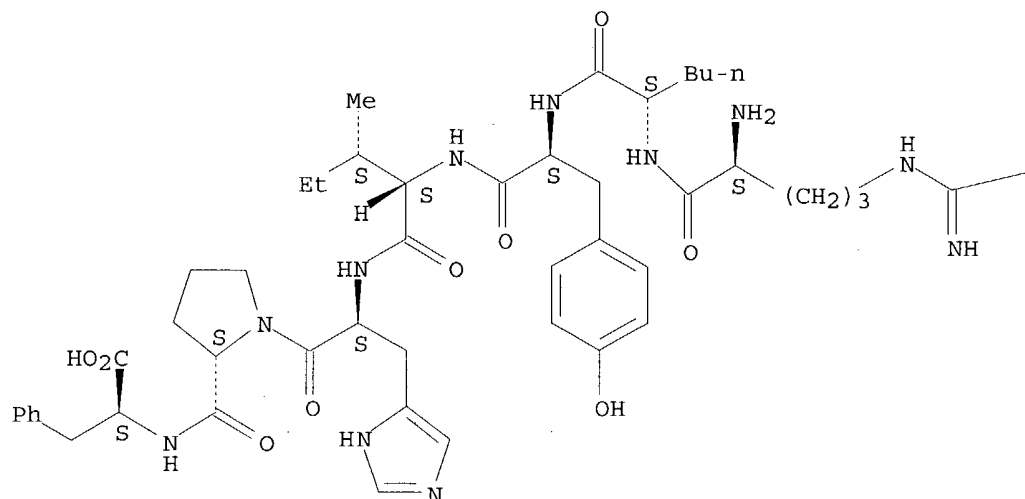
RN 210982-24-4 CAPLUS

CN Angiotensin III, 2-L-norleucine-4-L-isoleucine- (9CI) (CA INDEX NAME)

SEQ 1 RXYIHPF

Absolute stereochemistry.

PAGE 1-A



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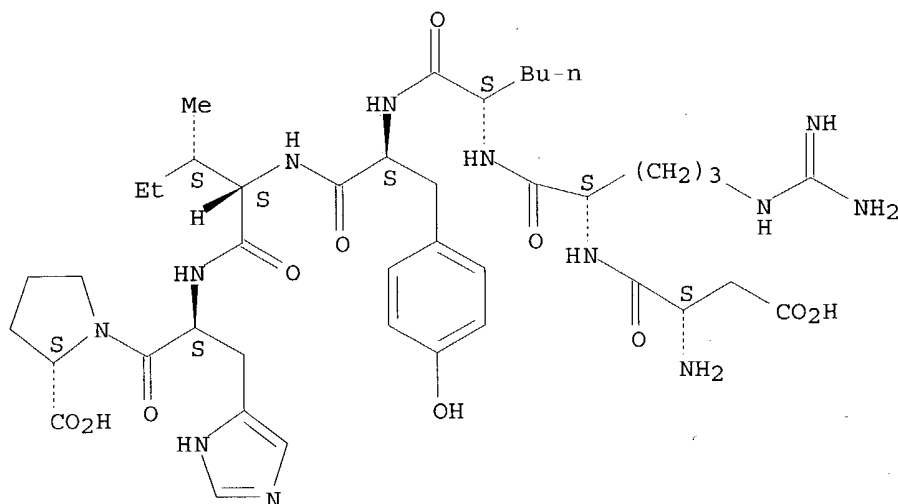
 $\text{—NH}_2$ 

RN 227803-63-6 CAPLUS

CN	1-7-Angiotensin II, 3-L-norleucine-5-L-isoleucine- (9CI)	(CA INDEX NAME)
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SEQ 1 DRXYIHP

Absolute stereochemistry.



L66 ANSWER 10 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:307821 CAPLUS

DOCUMENT NUMBER: 133:220872

DOCUMENT NUMBER: 189421-042  
TITLE: The role of vasoactive compounds, growth factors and cytokines in the progression of renal disease

AUTHOR(S) : Klahr, Saulo; Morrissey, Jeremiah J.

CORPORATE SOURCE: Department of Medicine, Washington University School of Medicine, Barnes-Jewish Hospital, St. Louis, MO, USA

SOURCE: Kidney International, Supplement (2000), 75, S7-S14

CODEN: KISUDF; ISSN: 0098-6577

PUBLISHER: Blackwell Science, Inc.

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

ED Entered STN: 12 May 2000

AB A review, with 67 refs. A no. of kidney diseases, and their progression to end-stage renal disease, are driven, in part, by the effects of angiotensin II. Increasing levels of angiotensin II may in turn up-regulate the expression of growth factors and cytokines, such as transforming growth factor-.beta.1 (TGF-.beta.1), tumor necrosis factor-.alpha. (TNF-.alpha.), osteopontin, vascular cell adhesion mol.-1 (VCAM-1), nuclear factor-.kappa.B (NF-.kappa.B), platelet-derived growth factor (PDGF), basic fibroblast growth factor (bFGF) and insulin-like growth factor. Most of these compds. promote cell growth and fibrosis. Angiotensin II also stimulates oxidative stress. This stress in turn may potentiate the vasoconstrictor effect of the peptide due, in part, to increased catabolism of nitric oxide (NO). Oxidative stress, fueled in part by angiotensin II, upregulates the expression of adhesion mols., chemoattractant compds. and cytokines. The angiotensinogen gene, which provides the precursor for angiotensin prodn., is stimulated by NF-.kappa.B activation. NF-.kappa.B is activated by angiotensin in the liver and in the kidney. This provides an autocrine reinforcing loop that up-regulates angiotensin prodn. Angiotensin II activates NF-.kappa.B through both AT1 and AT2 receptors. In addn., angiotensin-converting enzyme (ACE) inhibition markedly decreases NF-.kappa.B activation in the setting of renal disease.

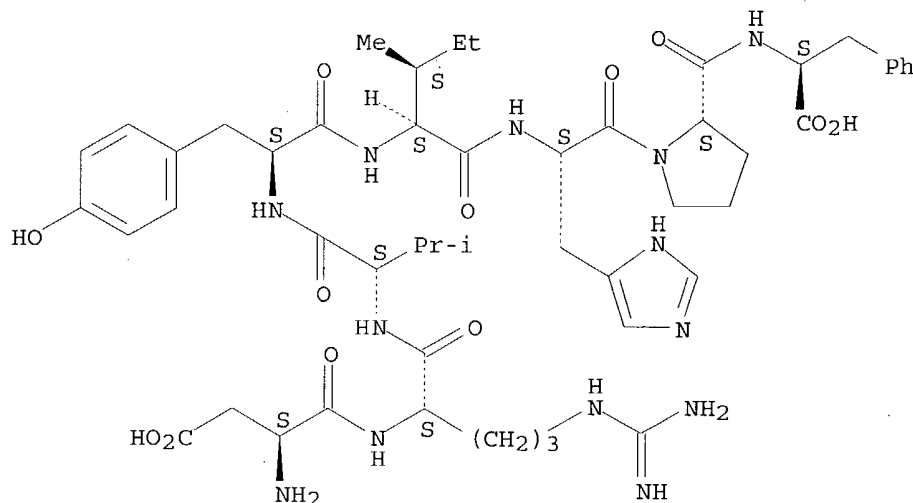
IT 4474-91-3

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(vasoactive compds., growth factors and cytokines in progression of  
renal disease)

RN 4474-91-3 CAPLUS  
 CN Angiotensin II, 5-L-isoleucine- (8CI, 9CI) (CA INDEX NAME)

SEQ 1 DRVYIHPF

Absolute stereochemistry.



REFERENCE COUNT: 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 11 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:736492 CAPLUS

DOCUMENT NUMBER: 131:347095

TITLE: Methods to increase white blood cell survival after chemotherapy using angiotensinogen, angiotensin I or II and their fragments or analogs

INVENTOR(S): Rodgers, Kathleen; Dizerega, Gere

PATENT ASSIGNEE(S): University of Southern California, USA

SOURCE: PCT Int. Appl., 88 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9958140	A1	19991118	WO 1999-US10205	19990510
W: AU, CA, JP, MX				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2322963	AA	19991118	CA 1999-2322963	19990510
AU 9939798	A1	19991129	AU 1999-39798	19990510
AU 759285	B2	20030410		
EP 1073453	A1	20010207	EP 1999-922905	19990510
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2003521441	T2	20030715	JP 2000-547991	19990510
PRIORITY APPLN. INFO.:			US 1998-84908P	P 19980511
			US 1998-92633P	P 19980713

WO 1999-US10205

W 19990510

OTHER SOURCE(S): MARPAT 131:347095

ED Entered STN: 19 Nov 1999

AB The present invention provides improved methods, kits, and pharmaceutical compns. for increasing white blood cell survival following chemotherapy, and mobilizing hematopoietic progenitor cells from bone marrow into peripheral blood, comprising the administration of an effective amt. of angiotensinogen, angiotensin I (AI), AI analogs, AI fragments and analogs thereof, angiotensin II (AII), AII analogs, AII fragments or analogs thereof or AII AT2 type 2 receptor agonists.

IT 4474-91-3 4474-91-3D, analogs and fragments

13602-53-4 39759-50-7 85734-57-2

209164-96-5 227803-63-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

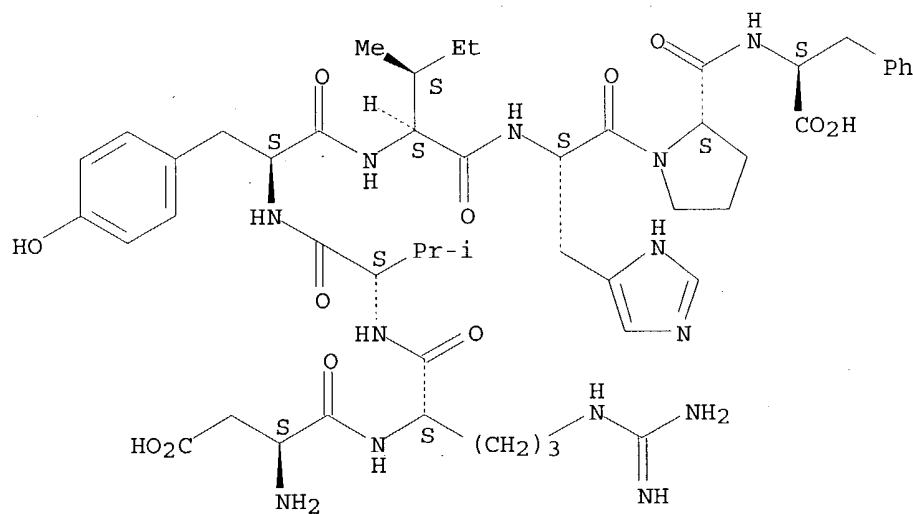
(methods to increase white blood cell survival after chemotherapy using angiotensinogen, angiotensin I or II and their fragments or analogs)

RN 4474-91-3 CAPLUS

CN Angiotensin II, 5-L-isoleucine- (8CI, 9CI) (CA INDEX NAME)

SEQ 1 DRVYIHPF

Absolute stereochemistry.

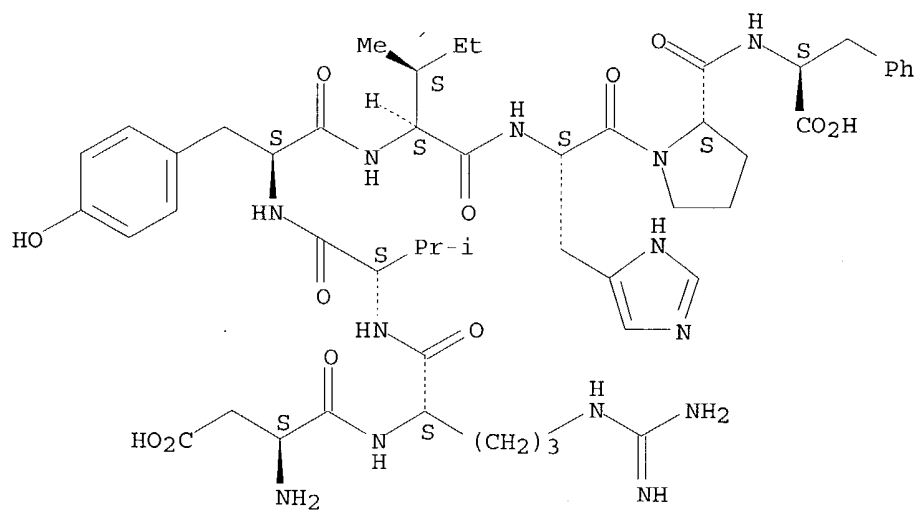


RN 4474-91-3 CAPLUS

CN Angiotensin II, 5-L-isoleucine- (8CI, 9CI) (CA INDEX NAME)

SEQ 1 DRVYIHPF

Absolute stereochemistry.



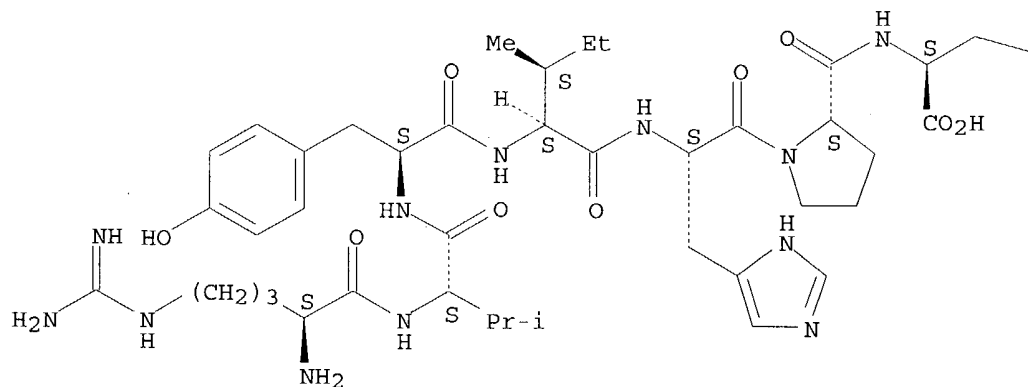
RN 13602-53-4 CAPLUS

CN Angiotensin III, 4-L-isoleucine- (9CI) (CA INDEX NAME)

SEQ 1 RVYIHPF

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

$$-\text{Ph}$$

RN 39759-50-7 CAPLUS

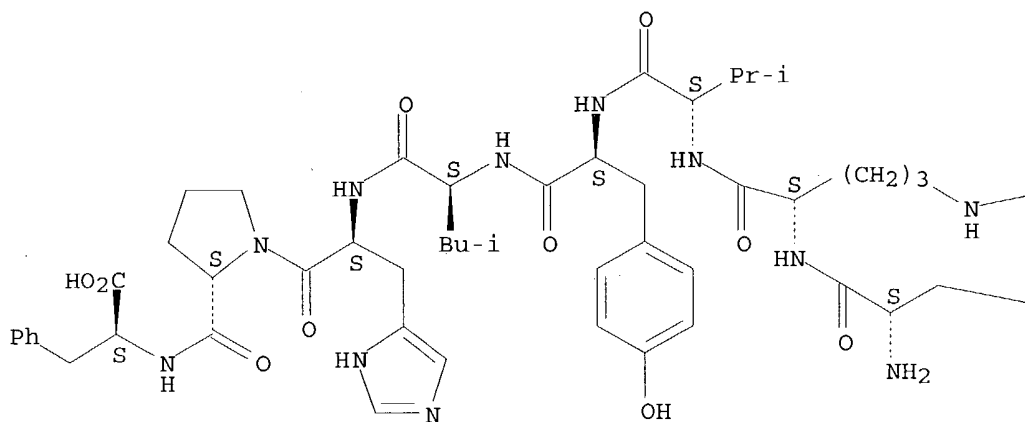
CN    Angiotensin, II, 5-L-leucine- (9CI)    (CA INDEX NAME)

SEQ 1 DRVYLHPF

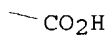
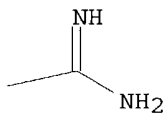


Absolute stereochemistry.

PAGE 1-A



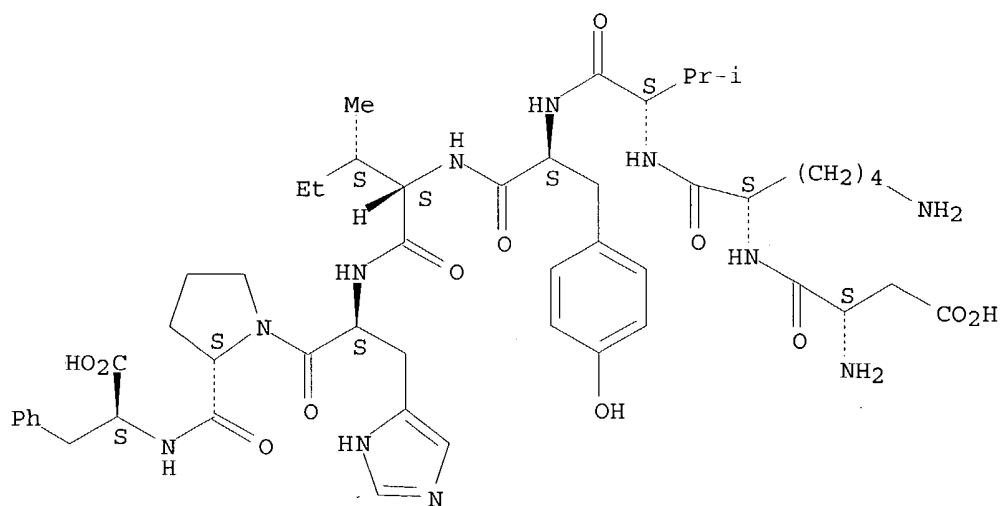
PAGE 1-B



RN 85734-57-2 CAPLUS  
 CN Angiotensin II, 2-L-lysine-5-L-isoleucine- (9CI) (CA INDEX NAME)

SEQ 1 DKVYIHPF

Absolute stereochemistry.



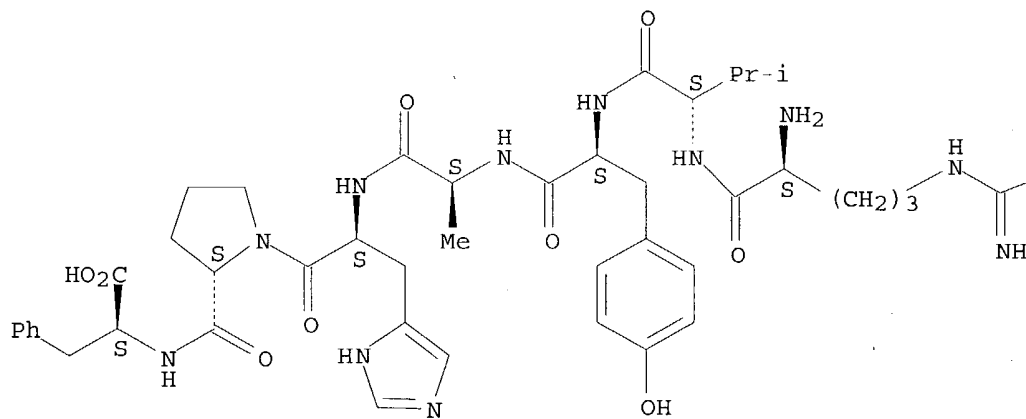
RN 209164-96-5 CAPLUS

CN Angiotensin III, 4-L-alanine- (9CI) (CA INDEX NAME)

SEQ 1 RVYAHPF

Absolute stereochemistry.

PAGE 1-A



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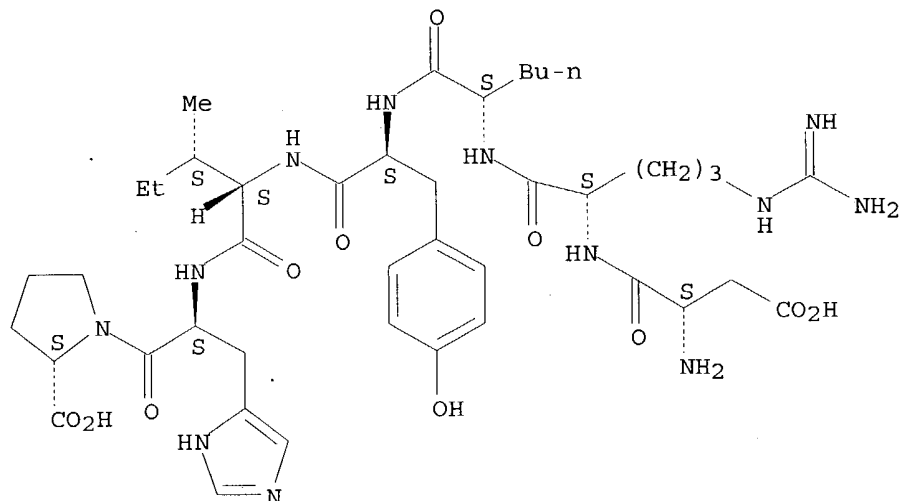
NH<sub>2</sub>

RN 227803-63-6 CAPLUS

CN 1-7-Angiotensin II, 3-L-norleucine-5-L-isoleucine- (9CI) (CA INDEX NAME)

SEQ 1 DRXYIHP

Absolute stereochemistry.



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 12 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1992:136047 CAPLUS  
 DOCUMENT NUMBER: 116:136047  
 TITLE: Dentifrices containing paptides  
 INVENTOR(S): Suido, Hirohisa; Katsuta, Tomoko; Nakamura, Shoichi  
 PATENT ASSIGNEE(S): Sunstar, Inc., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03261718	A2	19911121	JP 1990-59523	19900309
			JP 1990-59523	19900309

## PRIORITY APPLN. INFO.:

ED Entered STN: 03 Apr 1992

AB Dentifrices; useful for prevention of dental caries and periodontosis, contain peptides contg. 5-10 amino acid residues and the sequence Arg-Val-Tyr-Ile-His in the mols. H-Arg-Val-Tyr-Ile-His-Pro-Phe-OH (I) at 0.1 mM 97% inhibited adhesion of *Bacteroides gingivalis* to human gingival epithelial cells. CaCO<sub>3</sub> 45.0, Na CMC 1.0, glycerin 20, Na lauryl sulfate 1.5, flavors 1.0, Na saccharin 0.1, I 1.0, and H<sub>2</sub>O to 100 wt.% were mixed to give a toothpaste.

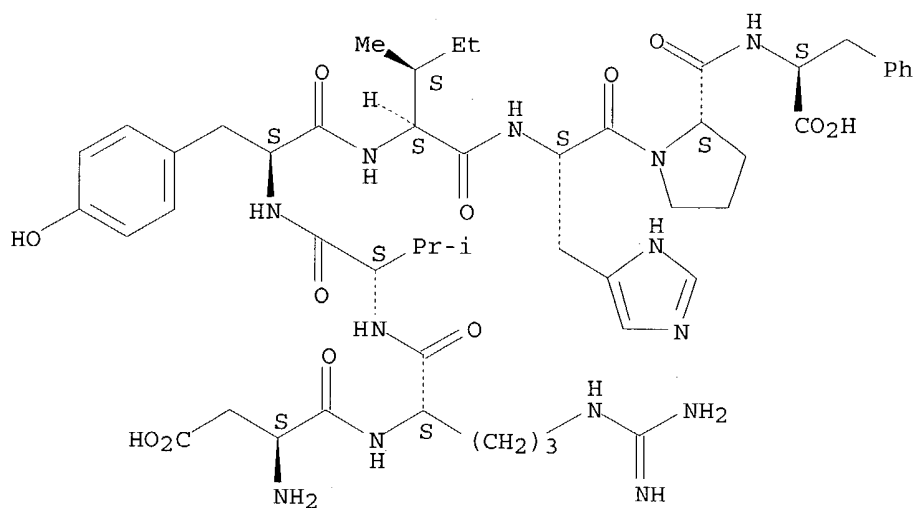
IT 4474-91-3

RL: BIOL (Biological study)  
 (dentifrices contg.)

RN 4474-91-3 CAPLUS

CN Angiotensin II, 5-L-isoleucine- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

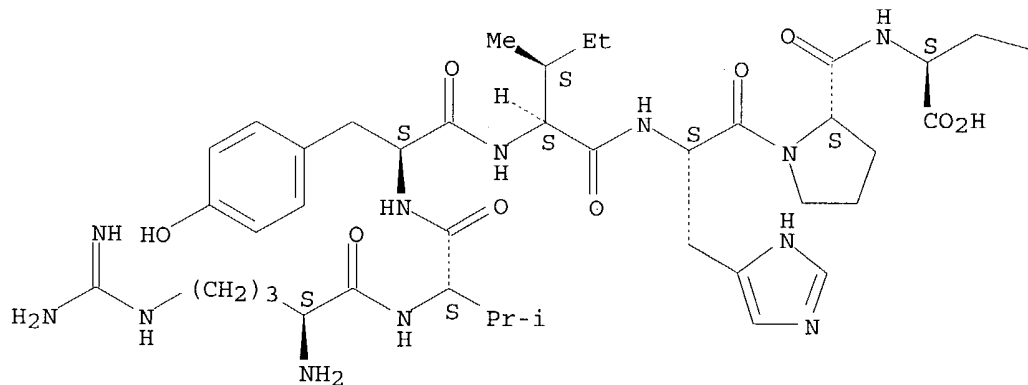


IT 13602-53-4P  
 RL: PREP (Preparation)  
 (prepn. of, dentifrices contg.)  
 RN 13602-53-4 CAPLUS  
 CN Angiotensin III, 4-L-isoleucine- (9CI) (CA INDEX NAME)

SEQ 1 RVYIHPF

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

Ph

L66 ANSWER 13 OF 26 TOXCENTER COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:139070 TOXCENTER  
COPYRIGHT: Copyright 2004 ACS  
DOCUMENT NUMBER: CA14113204280F  
TITLE: Should we restrict chloride rather than sodium?  
AUTHOR(S): McCarty, Mark F.  
CORPORATE SOURCE: Pantox Laboratories, San Diego, CA, 92109, USA.  
SOURCE: Medical Hypotheses, (2004) Vol. 63, No. 1, pp. 138-148.  
CODEN: MEHYDY. ISSN: 0306-9877.  
COUNTRY: UNITED STATES  
DOCUMENT TYPE: Journal  
FILE SEGMENT: CAPLUS  
OTHER SOURCE: CAPLUS (2004) 483256  
LANGUAGE: English  
ENTRY DATE: Entered STN: 20040622  
Last Updated on STN: 20040921

## ABSTRACT:

A review. Low-salt diets have potential for prevention and treatment of hypertension, and may also reduce risk for stroke, left ventricular hypertrophy, osteoporosis, renal stones, asthma, cataract, gastric pathol., and possibly even senile dementia. Nonetheless, the fact that salt restriction evokes certain counter-regulatory metabolic responses - increased prodn. of renin and angiotensin II, as well as increased sympathetic activity - that are potentially inimical to vascular health, has suggested to some observers that salt restriction might not be of unalloyed benefit, and might in fact be contraindicated in some "salt-resistant" subjects. Current epidemiol. indicates that lower-salt diets tend to reduce coronary risk quite markedly in obese subjects, whereas the impact of such diets on leaner subjects (who are less likely to be salt sensitive) is equivocal - seemingly consistent with the possibility that salt restriction can exert countervailing effects on vascular health. There is considerable evidence that sodium chloride, rather than sodium per se, is responsible for the known adverse effects of dietary salt. Other non-halide sodium salts, such as sodium citrate or bicarbonate, do not raise plasma vol., increase blood pressure, boost urinary calcium loss, or promote stroke in stroke-prone rats. Nonetheless, these compds. have been shown to blunt the impact of salt restriction on renin, angiotensin II, and sympathetic activity in humans. This may rationalize limited clin. evidence that org. sodium salts can decrease blood pressure in salt-restricted hypertensives. Furthermore, org. sodium salts have an alkalinizing metabolic impact favorable to bone health. These considerations suggest that restricting dietary salt to the extent feasible, while encouraging consumption of org. sodium salts in mineral waters, soft drinks, or other nutraceuticals - preferably in conjunction with org. potassium salts and taurine - may represent a superior strategy for controlling blood pressure, promoting vascular health, and preserving bone d. Further clin. studies should det. whether a moderately salt-restricted diet supplemented with org. sodium salts has a better and more uniform impact on hypertension than salt restriction alone, while rodent studies should examine the comparative impact of these regimens on rodents prone to vascular disease.

CLASSIFICATION CODE: 14-0

SUPPLEMENTARY TERMS: Miscellaneous Descriptors  
review salt sodium nutrient diet hypertensionREGISTRY NUMBER: 7647-14-5 (Salt)  
7440-23-5 (Sodium)  
9015-94-5 (Renin)

REGISTRY NUMBER: 4474-91-3

*Registry records for hits from Toxcenter B-  
USPATFULL printed*

L66 ANSWER 14 OF 26 TOXCENTER COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:88263 TOXCENTER  
COPYRIGHT: Copyright 2004 ACS  
DOCUMENT NUMBER: CA13618279477F  
TITLE: Preparation of pyrazines as modulators of vascular

*on pages 62-67*

AUTHOR(S): endothelial growth factor (VEGF) receptor tyrosine kinase.  
Kuo, Gee Hong; Connolly, Peter; Prouty, Catherine;  
Deangelis, Alan; Wang, Aihua; Jolliffe, Linda; Middleton,  
Steve; Emanuel, Stuart  
CORPORATE SOURCE: ASSIGNEE: Ortho-McNeil Pharmaceutical, Inc.  
PATENT INFORMATION: WO 2002024681 A2 28 Mar 2002  
SOURCE: (2002) PCT Int. Appl., 202 pp.  
CODEN: PIXXD2.  
COUNTRY: UNITED STATES  
DOCUMENT TYPE: Patent  
FILE SEGMENT: CAPLUS  
OTHER SOURCE: CAPLUS 2002.240758  
LANGUAGE: English  
ENTRY DATE: Entered STN: 20020416  
Last Updated on STN: 20020509

## ABSTRACT:

The present invention also provides pharmaceutical formulations contg. the pyrazine derivs. and methods of use of these formulations as anti-tumor agents and to treat solid-tumor cancers, angiogenesis, diabetic retinopathy, rheumatoid arthritis, endometriosis and psoriasis. Title compds. [I; R1 = (substituted) cycloalkyl, (bi)heterocyclyl, (bi)aryl, (bi)heteroaryl; A = N(R4)(CH2)x, O(CH2)x, S(CH2)x, SO2(CH2)x, SO2N(CH2)x, NSO2(CH2)x, N(R4)CONH(CH2)x, etc.; x = 0-4; R4 = H, alkyl, hydroxyalkyl, alkoxyalkyl, arylalkyl, alkenyl, (substituted) aryl, heteroaryl; R2 = (substituted) (bi)heteroaryl; R3 = H, alkyl, alkoxy, alkenyl, alkynyl, heterocyclyl, heterocyclylalkyl, heterocyclylalkoxy, aryl, aralkyl, aralkoxy, OH, hydroxyalkyl, halo, cyano, NO2, amino, (hydroxyalkyl)amino, di(hydroxyalkyl)amino, carbamoyl, acyl, acylalkyl, alkoxy carbonyl, alkoxy carbonylalkyl, acylamino, alkylsulfonyl, alkylsulfonylamino, (substituted) arylsulfonylamino], were prepd. Thus, a mixt. of Et 5-bromonicotinate, bis(tributyltin), Pd(OAc)2, tri-o-tolylphosphine, and Et3N in MeCN was stirred at 95-100.degree. for 22 h. to give 40% Et 5-trimethylstannyl nicotinate. The latter with 2,6-dichloropyrazine, Pd(PPh3)2Cl2, and LiCl were stirred in PhMe at 100.degree. for 23 h to give 60% Et 5-(6-chloropyrazin-2-yl)nicotinate. The latter with 3-chloroaniline, Pd2(dba)3, DPPF, and Cs2CO3 were stirred in dioxane at 110.degree. for 46 h to give Et 5-[6-(3-chlorophenylamino)]pyrazin-2-yl nicotinate. This was converted to 3-[[5-[6-[(3-chlorophenyl)amino]pyrazinyl]-3-pyridinyl]amino]-1-propanol in several steps. The latter inhibited HeLa cell proliferation with IC50 = 4.56 .mu.M.

CLASSIFICATION CODE: 28-17

SUPPLEMENTARY TERMS: Miscellaneous Descriptors  
pyrazine prepn vascular endothelial growth factor receptor  
modulator; anticancer pyridinylpyrazine prepn;  
angiogenesis inhibitor pyridinylpyrazine; diabetic  
retinopathy treatment pyridinylpyrazine; endometriosis  
treatment pyridinylpyrazine; psoriasis treatment  
pyridinylpyrazine

REGISTRY NUMBER: 20986-40-7 (Ethyl 5-bromonicotinate)  
35486-42-1 (3,5-Dibromo-2-aminopyridine)  
95-76-1 (3,4-Dichloroaniline)  
100-46-9 (Benzylamine)  
104-52-9 (1-Chloro-3-phenylpropane)  
104-94-9 (p-Anisidine)  
106-47-8 (4-Chloroaniline)  
108-42-9 (3-Chloroaniline)  
108-43-0 (3-Chlorophenol)  
109-70-6 (1-Bromo-3-chloropropane)  
288-88-0 (1H-1,2,4-Triazole)  
372-19-0 (3-Fluoroaniline)  
536-90-3 (3-Methoxyaniline)  
589-10-6 (.beta.-Bromophenetole)

701-99-5 (Phenoxyacetyl chloride)  
1193-21-1 (4,6-Dichloropyrimidine)  
2315-36-8 (2-Chloro-N,N-diethylacetamide)  
2969-81-5 (Ethyl 4-bromobutyrate)  
3167-49-5 (6-Aminonicotinic acid)  
4244-59-1 (3-Methoxypropanoyl chloride)  
4774-14-5 (2,6-Dichloropyrazine)  
4858-85-9 (2,3-Dichloropyrazine)  
5006-66-6 (6-Hydroxynicotinic acid)  
5139-89-9 (4-Phenoxybutyryl chloride)  
5197-62-6 (2-[2-[(2-Chloroethoxy)ethoxy]ethanol)  
5424-21-5 (2,4-Dichloro-6-methylpyrimidine)  
7357-67-7 (3-Morpholinopropyl chloride)  
13831-31-7 (Acetoxyacetyl chloride)  
14077-58-8 (Ethoxyacetyl chloride)  
16024-55-8 (2-Methoxyethoxyacetyl chloride)  
19798-81-3 (2-Amino-6-bromopyridine)  
20826-04-4 (5-Bromonicotinic acid)  
23611-75-8 (Methyl 6-chloro-2-pyrazinecarboxylate)  
39577-43-0 (1-(3-Chlorophenyl)-4-(3-chloropropyl)piperazine)  
51581-40-9 (3-Pyridyl diethyl carbamate)  
54149-17-6 (1-Bromo-2-(2-methoxyethoxy)ethane)  
56181-39-6 (4-Chloro-5-bromopyrimidine)  
120163-60-2 (1-(3-Chloropropyl)piperazine)  
164014-94-2 (2-Methoxy-6-tributylstannylpyridine)  
183438-24-6 (5-Bromo-2-iodopyrimidine)  
29241-62-1; 98976-80-8; 191089-04-0; 209681-13-0;  
322690-84-6; 361550-43-8; 380381-28-2; 405938-98-9;  
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REGISTRY NUMBER:

405940-11-6; 405940-12-7; 405940-13-8; 405940-14-9;  
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109-85-3; 156-87-6; 1458-63-5; 4584-46-7; 4755-50-4;  
5264-02-8; 5264-17-5; 6291-85-6; 21011-66-5; 38870-89-2;  
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138459-36-6; 163276-23-1; 176977-86-9; 187339-70-4;  
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104077-19-2; 136795-05-6; 138028-00-9; 187987-65-1;  
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406674-50-8; 406674-51-9

L66 ANSWER 15 OF 26 TOXCENTER COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: **2002:563624** TOXCENTER

DOCUMENT NUMBER: DART-TER-91000157

TITLE: [Study by intravenous administration of angiotensin II  
human during the perinatal and lactation periods in rats]  
AUTHOR(S): Hiramatsu Y; Shimizu Y; Suzuki T; Kobayashi Y; Fujimura T;  
Kato M; Koike T; Yamaguchi K; Suzuki R; Kato M; et al  
CORPORATE SOURCE: Hashima Laboratories, Nihon Bioresearch Center Inc.  
SOURCE: Kiso To Rinsho, (1990 Sep) 24 (12) 211-27.  
ISSN: 0385-2806.

DOCUMENT TYPE: Journal; Article; (Journal Article)

FILE SEGMENT: DART

LANGUAGE: Japanese

ENTRY DATE: Entered STN: 20021200

Last Updated on STN: 20021200

CONTROLLED TERM: Check Tags: Animal; Male; Female  
Pregnancy  
Rats  
Rats, Inbred Strains

\*Angiotensin II: TO, TOXICITY

Injections, Intravenous

Body Weight: DE, DRUG EFFECTS

Eating: DE, DRUG EFFECTS

\*Fetus: DE, DRUG EFFECTS

Motor Activity: DE, DRUG EFFECTS

Learning: DE, DRUG EFFECTS

Abnormalities, Drug-Induced

**Bone and Bones:** AB, ABNORMALITIES

Organ Weight: DE, DRUG EFFECTS

Reproduction: DE, DRUG EFFECTS

Prenatal Exposure Delayed Effects

REGISTRY NUMBER: 11128-99-7 (Angiotensin II)

**4474-91-3** (Angiotensin II human)

7647-14-5 (Saline)

L66 ANSWER 16 OF 26 TOXCENTER COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: **2002:563623** TOXCENTER

DOCUMENT NUMBER: DART-TER-91000156

TITLE: [Study by intravenous administration of angiotensin II



human during the period of organogenesis in rabbits]  
AUTHOR(S): Kato M; Shishid M; Sakuma T; Nandate J; Konishi K  
CORPORATE SOURCE: R&D Department, TOA EIYO LTD.  
SOURCE: Kiso To Rinsho, (1990 Sep) 24 (12) 201-10.  
ISSN: 0385-2806.  
DOCUMENT TYPE: Journal; Article; (Journal Article)  
FILE SEGMENT: DART  
LANGUAGE: Japanese  
ENTRY DATE: Entered STN: 20021200  
Last Updated on STN: 20021200  
CONTROLLED TERM: Check Tags: Animal; Male; Female  
Pregnancy  
Rabbits  
\*Angiotensin II: TO, TOXICITY  
Injections, Intravenous  
Body Weight: DE, DRUG EFFECTS  
Eating: DE, DRUG EFFECTS  
Organ Weight: DE, DRUG EFFECTS  
\*Fetus: DE, DRUG EFFECTS  
\*Abnormalities, Drug-Induced  
Bone and Bones: AB, ABNORMALITIES  
REGISTRY NUMBER: 11128-99-7 (Angiotensin II)  
4474-91-3 (Angiotensin II human)  
7647-14-5 (Saline)

L66 ANSWER 17 OF 26 TOXCENTER COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2002:563622 TOXCENTER  
DOCUMENT NUMBER: DART-TER-91000155  
TITLE: [Study by intravenous administration of angiotensin II  
human during the period of fetal organogenesis in rats]  
AUTHOR(S): Hiramatsu Y; Shimizu M; Suzuki T; Udo K; Iwasaki S; Kato  
M; Koike T; Asao M; Suzuki R; Kato M; et al  
CORPORATE SOURCE: Hashima Laboratories, Nihon Bioresearch Center Inc.  
SOURCE: Kiso To Rinsho, (1990 Sep) 24 (12) 181-99.  
ISSN: 0385-2806.  
DOCUMENT TYPE: Journal; Article; (Journal Article)  
FILE SEGMENT: DART  
LANGUAGE: Japanese  
ENTRY DATE: Entered STN: 20021200  
Last Updated on STN: 20021200  
CONTROLLED TERM: Check Tags: Animal; Male; Female  
Pregnancy  
Rats  
\*Angiotensin II: TO, TOXICITY  
Injections, Intravenous  
\*Fetus: DE, DRUG EFFECTS  
Body Weight: DE, DRUG EFFECTS  
Eating: DE, DRUG EFFECTS  
\*Abnormalities, Drug-Induced  
Bone and Bones: AB, ABNORMALITIES  
Learning: DE, DRUG EFFECTS  
Organ Weight: DE, DRUG EFFECTS  
Reproduction: DE, DRUG EFFECTS  
Prenatal Exposure Delayed Effects  
REGISTRY NUMBER: 11128-99-7 (Angiotensin II)  
4474-91-3 (Angiotensin II human)  
7647-14-5 (Saline)

L66 ANSWER 18 OF 26 TOXCENTER COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2002:563621 TOXCENTER  
DOCUMENT NUMBER: DART-TER-91000154  
TITLE: [Study by intravenous administration of angiotensin II

human prior to and in the early stages of pregnancy in rats]

AUTHOR(S): Hiramatsu Y; Okada K; Suzuki T; Shimizu M; Koike T; Udo K; Iwasaki S; Asano M; Suzuki R; Kato M; et al

CORPORATE SOURCE: Hashima Laboratories, Nihon Bioreserach Center Inc.

SOURCE: Kiso To Rinsho, (1990 Sep) 24 (12) 169-80.  
ISSN: 0385-2806.

DOCUMENT TYPE: Journal; Article; (Journal Article)

FILE SEGMENT: DART

LANGUAGE: Japanese

ENTRY DATE: Entered STN: 20021200  
Last Updated on STN: 20021200

CONTROLLED TERM: Check Tags: Animal; Male; Female  
Pregnancy  
Rats  
\*Angiotensin II: TO, TOXICITY  
Injections, Intravenous  
Rats, Inbred Strains  
Body Weight: DE, DRUG EFFECTS  
Eating: DE, DRUG EFFECTS  
Drinking: DE, DRUG EFFECTS  
\*Reproduction: DE, DRUG EFFECTS  
\*Fetus: DE, DRUG EFFECTS  
Abnormalities, Drug-Induced  
Bone and Bones: AB, ABNORMALITIES

REGISTRY NUMBER: 11128-99-7 (Angiotensin II)  
4474-91-3 (Angiotensin II, human)  
7647-14-5 (Saline)

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L66 ANSWER 19 OF 26 USPATEFULL on STN

ACCESSION NUMBER: 2004:108179 USPATEFULL

TITLE: Substituted triazine kinase inhibitors

INVENTOR(S): Kuo, Gee-Hong, Scotch Plains, NJ, UNITED STATES  
DeAngelis, Alan, Pennington, NJ, UNITED STATES  
Wang, Aihua, Jamison, PA, UNITED STATES  
Zhang, Yan, Hillsborough, NJ, UNITED STATES  
Emanuel, Stuart L., Doylestown, PA, UNITED STATES  
Middleton, Steve, Flemington, NJ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004082581	A1	20040429
APPLICATION INFO.:	US 2003-622721	A1	20030718 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-396948P	20020718 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	PHILIP S. JOHNSON, JOHNSON & JOHNSON, ONE JOHNSON & JOHNSON PLAZA, NEW BRUNSWICK, NJ, 08933-7003	
NUMBER OF CLAIMS:	36	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1939	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides substituted 1,3,5-triazine compounds as kinase inhibitors and a method for treating or ameliorating a kinase

mediated disorder.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 4474-91-3

(unclaimed sequence; prepn. of substituted triazines as selective kinase inhibitors)

L66 ANSWER 20 OF 26 USPATFULL on STN

ACCESSION NUMBER: 2003:289075 USPATFULL

TITLE: Angiotensin-(1-7) and angiotensin-(1-7) agonists for inhibition of cancer cell growth

INVENTOR(S): Tallant, E. Ann, Lewisville, NC, UNITED STATES  
Gallagher, Patricia E., Lewisville, NC, UNITED STATES  
Ferrario, Carlos M., Winston-Salem, NC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003203834	A1	20031030
APPLICATION INFO.:	US 2003-375733	A1	20030227 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-359847P	20020227 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Cynthia B. Rothschild, Esq., Kilpatrick Stockton LLP, 1001 West Fourth Street, Winston-Salem, NC, 27101-2400	
NUMBER OF CLAIMS:	67	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	16 Drawing Page(s)	
LINE COUNT:	1815	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention describes the use of angiotensin-(1-7) peptide as an anti-cancer therapeutic. Thus, in one embodiment, the present invention comprises a composition to inhibit the growth of cancer cells in an individual comprising a pharmaceutically effective amount of an agonist for the angiotensin-(1-7) receptor to inhibit cancer cell growth or proliferation. Application of a pharmaceutically effective amount of angiotensin-(1-7) or angiotensin-(1-7) receptor agonist is associated with an increase in the expression of genes involved in tumor suppression, apoptosis, and/or cell cycle inhibition, and a decrease the expression of known oncogenes, protein kinases, and/or cell cycle progression genes. Cancers treated using the methods and compositions described herein include cancers having an angiotensin-(1-7) receptor, including, but not limited to, breast and lung cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 51833-78-4

(angiotensin (1-7) and angiotensin (1-7) receptor agonists for inhibition of cancer cell growth in relation to cellular effects and gene expression)

IT 4474-91-3 13602-53-4

(unclaimed sequence; angiotensin-(1-7) and angiotensin-(1-7) agonists for inhibition of cancer cell growth)

L66 ANSWER 21 OF 26 USPATFULL on STN

ACCESSION NUMBER: 2002:221007 USPATFULL

TITLE: Cancer treatment

INVENTOR(S): Vinson, Gavin Paul, London, UNITED KINGDOM  
Puddefoot, John Richard, London, UNITED KINGDOM  
Berry, Miles Gordon, London, UNITED KINGDOM

PATENT ASSIGNEE(S): Queen Mary & Westfield College [GB/GB] (non-U.S.)

corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002119142	A1	20020829
APPLICATION INFO.:	US 2001-784005	A1	20010216 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. WO 1999-GB2727, filed on 18 Aug 1999, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1998-18023	19980818
	GB 1998-20000	19980914
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W., SUITE 600, WASHINGTON, DC, 20005-3934	
NUMBER OF CLAIMS:	8	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Page(s)	
LINE COUNT:	765	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the use of angiotensin in a method for the treatment or prevention of cancer. The method comprises administering to a patient in need of treatment an effective amount of an angiotensin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 4474-91-3

(cancer metastasis treatment with angiotensin)

L66 ANSWER 22 OF 26 USPATFULL on STN  
 ACCESSION NUMBER: 2001:107861 USPATFULL  
 TITLE: Methods for accelerating bone and cartilage growth and repair  
 INVENTOR(S): Rodgers, Kathleen E., Long Beach, CA, United States  
 Dizerega, Gere S., Pasadena, CA, United States  
 PATENT ASSIGNEE(S): University of Southern California, Los Angeles, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6258778	B1	20010710
APPLICATION INFO.:	US 1999-352191		19990712 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-92653P	19980713 (60)
	US 1999-130855P	19990422 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Davenport, Avis M.	
LEGAL REPRESENTATIVE:	McDonnell, Boehnen, Hulbert & Berghoff, Harper, David S.	
NUMBER OF CLAIMS:	35	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	4 Drawing Figure(s); 4 Drawing Page(s)	
LINE COUNT:	1595	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides improved methods, kits, and compositions for enhancing bone, cartilage and cartilage repair, bone and prosthesis implantation, and attachment and fixation of cartilage and cartilage to

APPL

bone or other tissues, and chondrocyte proliferation comprising the administration of an effective amount of angiotensinogen, angiotensin I (AI), AI analogues, AI fragments and analogues thereof, angiotensin II (AII), AII analogues, AII fragments or analogues thereof or AII AT.sub.2 type 2 receptor agonists.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 4474-91-3 4474-91-3D, analogs and fragments  
13602-53-4, Angiotensin II (2-8) 39759-50-7  
85734-57-2 129785-85-9 209164-96-5  
209165-00-4 210982-24-4 227803-63-6

(methods for accelerating bone and cartilage growth and repair using angiotensinogen, angiotensin I and II, analogs or fragments, or AT2 receptor agonists)

L66 ANSWER 23 OF 26 USPATFULL on STN

ACCESSION NUMBER: 2000:43494 USPATFULL

TITLE: Support apparatus

INVENTOR(S): Larsen, Marilyn M., 15313 Gosford Rd., Bakersfield, CA,  
United States 93313-9613

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6048253		20000411
APPLICATION INFO.:	US 1998-92653		19980605 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-48684P	19970605 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Hale, Gloria M.	
LEGAL REPRESENTATIVE:	Worrel & Worrel	
NUMBER OF CLAIMS:	9	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	5 Drawing Figure(s); 3 Drawing Page(s)	
LINE COUNT:	395	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A support apparatus having a main panel constructed of substantially elastic material and dimensioned to be positionable about a portion of the body of a person in supporting relation thereto, such as the protruding region of the abdomen of a pregnant woman; and fasteners operable releasibly to secure the main panel in the supporting relation to provide such support.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 4474-91-3 4474-91-3D, analogs and fragments  
13602-53-4, Angiotensin II (2-8) 39759-50-7  
85734-57-2 129785-85-9 209164-96-5  
209165-00-4 210982-24-4 227803-63-6

(methods for accelerating bone and cartilage growth and repair using angiotensinogen, angiotensin I and II, analogs or fragments, or AT2 receptor agonists)

L66 ANSWER 24 OF 26 PROUSDDR COPYRIGHT 2004 PROUS SCIENCE on STN

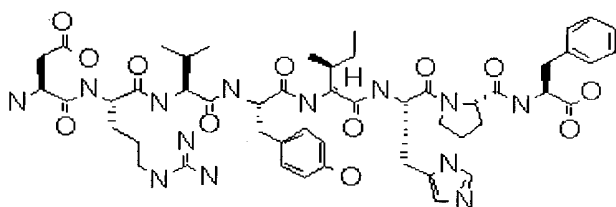
ACCESSION NUMBER: 1991:3147 PROUSDDR

DOCUMENT NUMBER: T70013

CHEMICAL NAME: Aspartyl-arginyl-valyl-tyrosyl-isoleucyl-histidyl-prolyl-phenylalanine

CHEMICAL NAME: (Asp1-Ile5)-angiotensin II  
DRUG NAME: TY-10721  
GENERIC NAME: Angiotensin II (human, Rec INN)  
Human angiotensin II (Rec INN)  
BRAND NAME: Deliverit  
CAS REGISTRY NUMBER: 4474-91-3  
MOLECULAR FORMULA: C50 H71 N13 O12  
HIGHEST DEV. PHASE: LAUNCHED (1994)  
ORIGINATOR: Toa Eiyo  
LICENSEE: Yamanouchi  
CLASSIFICATION CODE: Cardiovascular Diseases (Not Specified); Oncolytic  
Drugs; Drug Delivery Systems  
ENTRY DATE: Entered STN: 9 May 2004  
Last Updated on STN: 1 Jun 2004

## STRUCTURE:



## PROUS REFERENCES:

RefID: 140583 (Text Available)  
Drug Data Report, Vol. 13, No. 5, pp 396, 1991  
  
RefID: 275658 (Text Available)  
Drug Data Report, Vol. 16, No. 11, pp 1052, 1994

## REFERENCE TEXT:

RefID: 140583  
ACTION - Human angiotensin II analog which produced a transient hypertension (about 62% elevation of mean arterial blood pressure) when infused at 2.5-5 mcg/ml in healthy volunteers. This hypertensive state has been used in phase II clinical studies in patients with various types of advanced cancer as a way to selectively enhance delivery of chemotherapeutic agents into tumor tissues.

RefID: 275658  
ACTION - Vasopressor, human angiotensin II. INDICATION - For enhancing the effects of combination therapy with doxorubicin hydrochloride, fluorouracil and mitomycin C in the treatment of gastric cancer. PRESENTATION - Vials for injection, 0.05 mg.

## PATENT REFERENCES:

TITLE: Methods for treating and preventing alopecia  
INVENTOR(S): Dizerega, G.S.; Roders, K.E.  
PATENT ASSIGNEE(S): University of Southern California  
PATENT INFORMATION: EP 1292610 20030319  
WO 2001098325 20011227  
PRIORITY INFORMATION: US 2000-212608 20000619

## REFERENCES:

(1) RefID: 140352, Periodic Publication

- "Phase I study of TY-10721 ((Asp1-Ile5) angiotensin II)"  
Sato, H.; et al., Jpn J Clin Pharmacol Ther, Vol. 21, No. 4, pp 731, 1990
- (2) RefID: 140353, Periodic Publication  
"Phase II study of TY-10721 ((Asp1-Ile5) angiotensin II) in advanced cancer patients for induced hypertension chemotherapy"  
Sato, H.; et al., Jpn J Clin Pharmacol Ther, Vol. 21, No. 4, pp 739, 1990
- (3) RefID: 256525, Periodic Publication  
"Toa Eiyo to launch angiotensin II preparation for cancer treatment, through Yamanouchi"  
Kagaku Kogyo Nippo, pp May 12, 1994
- (4) RefID: 547532, Periodic Publication  
"Distinction between surmountable and insurmountable selective AT1 receptor antagonists by use of CHO-K1 cells expressing human angiotensin II AT1 receptors"  
Vanderheyden, P.M.L.; Fierens, F.L.P.; De Backer, J.P.; Fraeyman, N.; Vauquelin, G., Br J Pharmacol, Vol. 126, No. 4, pp 1057, 1999
- (5) RefID: 671181, Periodic Publication  
"The cardiac effects of intracoronary angiotensin II infusion"  
Broome, M.; et al., Anesth Analg, Vol. 94, No. 4, pp 787, 2002
- (6) RefID: 676164, Periodic Publication  
"Synergistic upregulation of ABCA1 mRNA by angiotensin II and oxidized LDL in human peripheral blood monocyte from normocholesterolemic healthy volunteers"  
Matsuura, K.; et al., Circ J, Vol. 66, No. Suppl. 1, (Abst PE-418), 2002
- (7) RefID: 679472, Periodic Publication  
"Effects of angiotensin II microinjected into medial amygdala on male sexual behavior in rats"  
Breigeiron, M.K.; et al., Horm Behav, Vol. 41, No. 3, pp 267, 2002
- (8) RefID: 682459, Periodic Publication  
"Angiotensin II stimulates synthesis of vascular smooth muscle cell proteoglycans with enhanced low density lipoprotein binding properties"  
Figuerola, J.E.; Vijayagopal, P., Atherosclerosis, Vol. 162, No. 2, pp 261, 2002
- (9) RefID: 685212, Periodic Publication  
"Effects of angiotensin II infusion on renal excretion of purine bases and oxypurinol"  
Moriwaki, Y.; et al., Metab Clin Exp, Vol. 51, No. 7, pp 893, 2002
- (10) RefID: 687270, Periodic Publication  
"Angiotensin II-induced inhibition of calcium currents via G(Q/11)-protein involving protein kinase C in hamster submandibular ganglion neurons"  
Yamada, E.; et al., Neurosci Res, Vol. 43, No. 2, pp 179, 2002
- (11) RefID: 688389, Periodic Publication  
"Early onset of chondroitin sulfate and osteopontin expression in angiotensin II-dependent left ventricular hypertrophy"  
Rothermund, L.; Kreutz, R.; Kossmehl, P.; Fredersdorf, S.; Shakibaei, M.; Schulze-Tanzil, G.; Paul, M.; Grimm, D., Am J Hypertens, Vol. 15, No. 7, pp 644, 2002

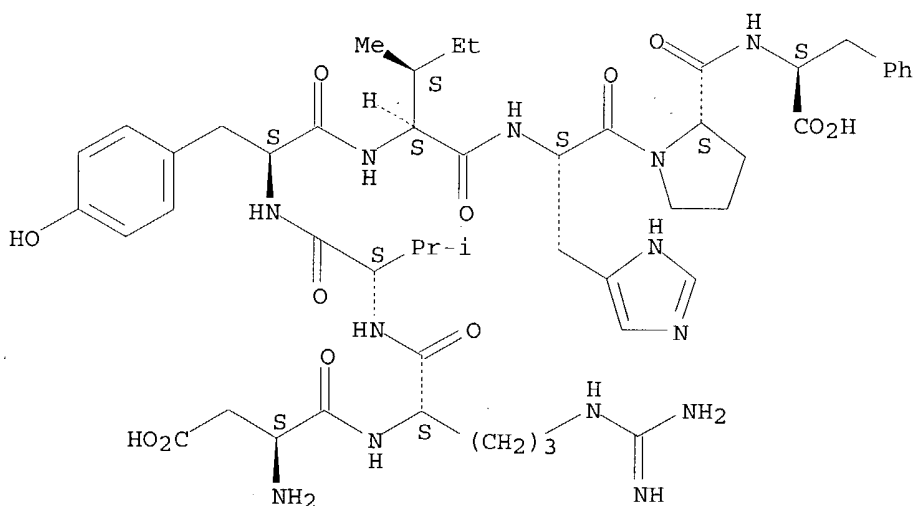
- (12) RefID: 688634, Periodic Publication  
"Angiotensin II attenuates the vasodilating effect of a nitric oxide donor, glyceryl trinitrate: Roles of superoxide and angiotensin II type 1 receptors"  
Wada, A.; Ueda, S.; Masumori-Maemoto, S.; Kuji, N.; Sugimoto, K.; Umemura, S., Clin Pharmacol Ther, Vol. 71, No. 6, pp 440, 2002

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BINARY DATA HAVE BEEN DOWNLOADED TO MULTIPLES FILES 'IMAGEnnn.TIF'

L66 ANSWER 25 OF 26 ADISINSIGHT COPYRIGHT (C) 2004 Adis Data Information BV  
on STN  
ACCESSION NUMBER: 1998:5006 ADISINSIGHT  
SOURCE: Adis R&D Insight  
DOCUMENT NO: 005583  
CHANGE DATE: May 18, 2001  
GENERIC NAME: CRL 1072  
MOLECULAR FORMULA: C50 H71 N13 O12  
CAS REGISTRY NO.: 4474-91-3  
STRUCTURE:

Absolute stereochemistry.



EPHRA ATC CODE: D6D Topical Viral Infection Products; J1X9 All other antibiotics; J5B Antivirals, excluding anti-HIV products; L4 Immunosuppressive agents  
WHO ATC CODE: D06B-B Antivirals; J01X-X Other antibacterials; J05 Antivirals for Systemic Use; L03 Immunostimulants  
HIGHEST DEV. PHASE: Discontinued Preclinical

CURRENT DEVELOPMENT STATUS:

Discontinued Preclinical, United States, Bacterial infections  
Discontinued Preclinical, United States, Hepatitis B  
Discontinued Preclinical, United States, Herpes simplex virus infections

COMPANY INFORMATION

ORIGINATOR: CytrX Corporation (United States)  
PARENT: CytrX Corporation

WORD COUNT: 645



## TEXT

## Introduction:

CRL 1072 is a poloxamer surfactant with antibacterial activity against Gram-positive, Gram-negative and mycobacteria. It has also shown antiviral activity against hepatitis B and herpes simplex viruses. CRL 1072 was undergoing preclinical investigation with CytRx Corporation in the USA. However, CytRx has discontinued development of CRL 1072. A representative of the company stated in December 2000 that it intended to licence CRL 1072 for development as an antiviral agent.

## PHARMACOLOGY OVERVIEW:

## Antimicrobial activity:

Synergistically enhances bactericidal activity of vancomycin and ampicillin against staphylococcal strains and of antimycobacterials against *Mycobacterium tuberculosis* and *M. avium*; antiviral activity against aciclovir-resistant HSV; synergistic activity against HBV in combination with lamivudine

## Pharmacodynamics:

Protects mice against lethal infection with *Mycobacterium avium* in combination with clindamycin

## Mechanism of action:

Immunomodulators

Undefined mechanism

## PHARMACOLOGY:

## Antimicrobial activity (Bacterial Infections):

CRL 1072 synergistically enhanced the activity of many antimycobacterials in vitro against both susceptible and drug-resistant strains of *Mycobacterium tuberculosis* and *Mycobacterium avium*. CRL 1072 alone did not inhibit the growth of *Staphylococcus aureus* ATCC 33591 and 14154 but in combination with vancomycin and ampicillin enhanced the bactericidal activity of these drugs against staphylococcal strains. Also a combination of CRL1072 and tetracycline resulted in enhanced killing of a tetracycline resistant strain of *Enterobacter faecalis* ATCC 29212/1/.

Similarly, combinations of CRL 1072 with clarithromycin and ciprofloxacin and a reverse poloxamer surfactant CRL 1605, resulted in bactericidal activity against both *M. tuberculosis* and *M. avium*. In combination with minocycline, CRL 1072 and CRL 1605 showed a marked reduction of MICs against *M. tuberculosis* (3-fold) and *M. avium* (5-fold). CRL 1072 and CRL 1605 showed greater synergy than either drug alone/2/.

A study investigated the activity of CRL 1072 against *Mycobacterium avium* in vitro. *M. avium* strains TMC 724 and ATCC 49601 were tested for drug susceptibility using an in vitro macrophage infection model. CRL 1072 inhibited the intracellular growth of these strains with an MIC of 5 microg/ml. The combination of CRL 1072 with rifampicin, clindamycin, amikacin or streptomycin enhanced the antimycobacterial potency of these drugs reducing their MICs by 5- to 10-fold below the levels required to inhibit the intracellular growth of mycobacteria/3/.

Low concentrations of CRL 1072 (1-4 microg/ml) did not inhibit the growth of *S. aureus* ATCC 29213 and 14154 or *Pseudomonas aeruginosa* ATCC 27853 in a microdilution MIC assay. However, when combined with vancomycin 0.78 to 25 microg/ml, CRL 1072 1-4 microg/ml enhanced the bactericidal activity of vancomycin against these staphylococcal strains resulting in a 2-fold or greater decrease in the number of surviving bacteria. Similarly a combination of CRL 1072 and ceftriaxone was more effective in killing *P. aeruginosa* than ceftriaxone alone/4/.

CRL1072 enhanced the bactericidal activity of streptomycin against a streptomycin-resistant strain of *M. tuberculosis* in a murine model of infection. In acute infection in mice, CRL1072 was only weakly bacteriostatic when used as a single agent but increased the bactericidal activity of isoniazid, streptomycin, rifampicin, pyrazinamide and clindamycin, but not that of ethambutol/5/.

## Antimicrobial activity (Viral Infections):

Hepatitis B virus infections: CRL 1072 inhibited both intracellular HBV replication and the release of extracellular virions in the chronic HBV-producing human liver cell line 2.2.15. The EC sub(50) and EC sub(90) values were 0.19 and 0.7 micromol/L, respectively, with a 50% cytotoxic concentration of 88.4 micromol/L. CRL 1072 showed synergistic activity against HBV when used in combination with lamivudine, reducing the EC sub(90) of CRL 1072 to 0.054 micromol/L. No increase in toxicity was observed/6/.

Herpes simplex virus infections: in cells infected with various strains of HSV-1 and HSV-2, including two aciclovir-resistant strains, CRL 1072 limited the number and size of virus plaques and reduced the virus yield. EC sub(50) values for CRL 1072 ranged from 0.25 to 4.06 micromol/L/7/.

In a hairless mouse skin model infected with HSV-1, CRL 1072 applied topically bid for 8 days reduced both the frequency and severity of skin lesions/7/.

## Pharmacodynamics (Bacterial Infections):

In beige mice lethally infected with the *M. avium* strain TMC 724, a combination of CRL 1072 with clindamycin was 100% protective, but monotherapy with either CRL 1072 (survival 55%) or clindamycin (survival 30%) was less effective. Combined therapy also reduced the cfu counts of organs by  $\geq 2$  logs compared with a 1 log decrease during monotherapy/4/.

## DEVELOPMENT HISTORY:

18 May 2001 An animal study has been added to the Bacterial infections pharmacodynamics field (7202760)  
 28 Dec 2000 CRL 1072 is available for licensing ([http:// www.cytrx.com](http://www.cytrx.com))  
 28 Dec 2000 Discontinued-Preclinical for Bacterial infections in USA (Unknown route)  
 28 Dec 2000 Discontinued-Preclinical for Hepatitis B in USA (Unknown route)  
 28 Dec 2000 Discontinued-Preclinical for Herpes simplex virus infections in USA (Unknown route)  
 28 Dec 2000 Profile reviewed by CyTRx Corporation  
 04 Sep 1998 No-Development-Reported for Bacterial infections in USA (Unknown route)  
 04 Sep 1998 No-Development-Reported for Hepatitis B in USA (Unknown route)  
 04 Sep 1998 No-Development-Reported for Herpes simplex virus infections in USA (Unknown route)  
 18 Aug 1998 An in vitro study has been added to the antimicrobial activity field (516515)  
 18 Apr 1996 An in vivo study on the efficacy of CRL 1072 against mycobacteria has been added to the antimicrobial activity field (394398)  
 04 Apr 1996 A study investigating anti-HBV effects has been added to the Viral infections antimicrobial activity field (426182)  
 04 Apr 1996 Preclinical development for Hepatitis B in USA (Unknown route)  
 05 Feb 1996 Preclinical development for Herpes simplex virus infections in USA (Topical)  
 14 Jul 1995 New profile  
 14 Jul 1995 Preclinical development for Bacterial infections in USA (Unknown route)

## REFERENCES

1. Allaudeen HS, Jagannath C, et al. CRL-1072 increases bactericidal action of antibiotics. Antibiotic Discovery Exploiting New Understanding of Mechanisms of Action. : 26 Jun 1995. (English).
2. Jagannath C, Srinivasan I, et al. Enhancement of in vitro antibiotic susceptibility in *Mycobacterium avium* and *Mycobacterium tuberculosis* by Poloxamers CRL-1072 and CRL-1605. 36th Interscience Conference on Antimicrobial Agents and Chemotherapy. : 138, 15 Sep 1996. (English).
3. Davidson SK, Jagannath C, et al. Enhancement of bactericidal action of antibiotics by CRL-1072. 35th Interscience Conference on Antimicrobial Agents and Chemotherapy. : 118, 17 Sep 1995. (English).
4. Jagannath C, Allaudeen HS, et al. Activity of CRL-1072 against *Mycobacterium*

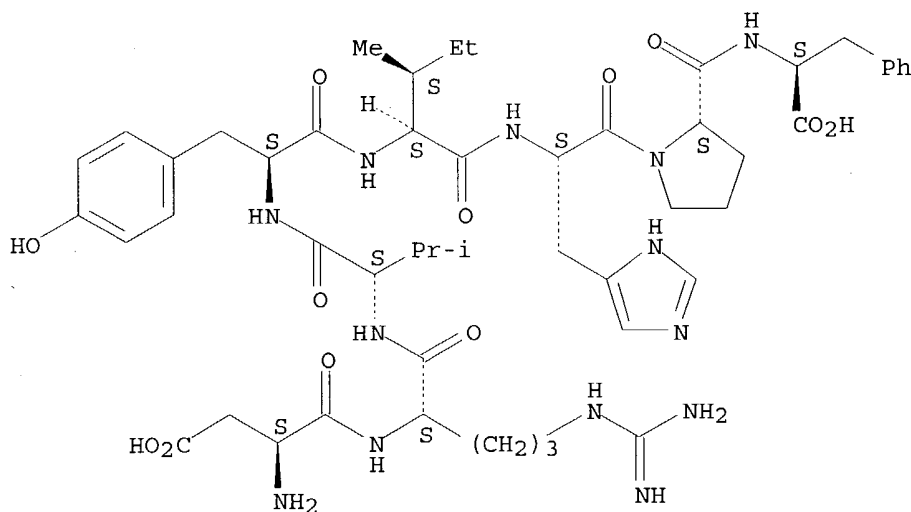
avium in vitro and in vivo. 35th Interscience Conference on Antimicrobial Agents and Chemotherapy. : 118, 17 Sep 1995. (English).

5. Jagannath C, Emanuele MR, et al. Activity of poloxamer CRL-1072 against drug-sensitive and resistant strains of Mycobacterium tuberculosis in macrophages and in mice. International Journal of Antimicrobial Agents. 15: 55-63, Jun 2000. (English).
6. Allaudeen HS, Korba B, et al. CRL-1072, a novel compound, selectively inhibits hepatitis B virus in vitro. 1st International Conference on Therapies for Viral Hepatitis. : 52, 11 Dec 1995. (English).
7. Abghari SZ, Allaudeen HS, et al. Antiviral activity of CRL-1072 against sensitive and drug-resistant herpes simplex virus type 1 and 2. 35th Interscience Conference on Antimicrobial Agents and Chemotherapy. : 197, 17 Sep 1995. (English).

L66 ANSWER 26 OF 26 ADISINSIGHT COPYRIGHT (C) 2004 Adis Data Information BV  
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ACCESSION NUMBER: 1998:814 ADISINSIGHT  
SOURCE: Adis R&D Insight  
DOCUMENT NO: 000872  
CHANGE DATE: Nov 28, 2000  
GENERIC NAME: Human angiotensin II  
SYNONYM: (Asp1-Ile5) angiotensin II; Angiotensin II (human); TY 10721  
CHEMICAL NAME: Aspartyl-arginyl-valyl-tyrosyl-isoleucyl-histidyl-prolyl-phenylalanine  
TRADE NAME: Delivert  
MOLECULAR FORMULA: C50 H71 N13 O12  
CAS REGISTRY NO.: 4474-91-3  
STRUCTURE:

Absolute stereochemistry.



EPHMRA ATC CODE: L1 Cytostatics  
WHO ATC CODE: L01 Antineoplastic Agents  
HIGHEST DEV. PHASE: Launched

CURRENT DEVELOPMENT STATUS:  
Launched, Japan, Cancer

## COMPANY INFORMATION

ORIGINATOR: Toa Eiyo (Japan)  
PARENT: Toa Eiyo  
LICENSEE: Yamanouchi

OTHER SOURCES: 800074778  
WORD COUNT: 449

## TEXT

## Introduction:

Human angiotensin II ((Asp1-Ile5) angiotensin II, TY 10721), developed by Toa Eiyo, is being evaluated clinically as an agent that induces hypertension during chemotherapy and thereby enhances drug delivery to tumour tissue. It has been launched in Japan as Delivert sup((R)) for the treatment of cancer. Human angiotensin II is marketed by Yamanouchi.

## EVALUATION:

Cancer 41 (IV).

## PHARMACOLOGY OVERVIEW:

## Pharmacodynamics:

Increases blood pressure

Mechanism of action:

Undefined mechanism

## CLINICAL OVERVIEW:

Route(s) of Administration: IV-infusion

Adverse events:

occasional: Pain.

## Adverse Events:

Human angiotensin II was administered in association with doxorubicin, fluorouracil and mitomycin to patients with gastric cancer. Although insignificant, toxicities occurred slightly more frequently in the group receiving human angiotensin II + antineoplastics compared with the control group receiving only antineoplastics:  $\geq$  grade 3 anaemia 18% vs 6% of patients,  $\geq$  grade 3 leucopenia 32% vs 28%,  $\geq$  grade 2 anorexia 44% vs 34%,  $\geq$  grade 2 fever 23% vs 16% and  $\geq$  grade 2 oral cavity toxicity 12% vs 0%. Other toxicities experienced in both groups included thrombocytopenia, nausea and vomiting, alopecia and diarrhoea. The patients receiving human angiotensin II reported tension in the neck and shoulders, pressure sensation in the chest and dull pain and heat sensation at the tumour site. None of these effects interrupted drug administration/1/.

## PHARMACOLOGY:

## Pharmacokinetics:

Clinical studies: the  $t_{sub(1/2)}$  in 6 volunteers was 69.3 sec/2/.

## Pharmacodynamics (Cancer):

Clinical studies: human angiotensin II (2.5-5 microg/ml) administered to 6 healthy male volunteers, resulted in the MAP rising from 86 to 139mm Hg within 4 min of starting the infusion. A level of 144mm Hg was maintained. The plasma angiotensin II concentration increased from 23.2 pg/ml before to 260.0 pg/ml during the hypertensive state. There appeared to be no relationship between human angiotensin II dose and the level of elevation of BP/2/. Induced hypertension chemotherapy using human angiotensin II was performed in 12 patients with advanced cancers. Hypertension was induced within 150mm Hg of the mean BP level and was maintained at that level after drug administration. Within 2.5-4 min of the start of the infusion of human angiotensin II, the mean BP levels reached 136 and 139mm Hg with human angiotensin II 2.5 and 5 microg/ml, respectively. For adequate control of the hypertensive state during drug administration, it was noted that the dose of human angiotensin II should be adjusted according to the mean BP level/3/.

## THERAPEUTIC TRIALS:

## Cancer:

Gastric cancer: human angiotensin II was used to induce hypertension while chemotherapy with doxorubicin + fluorouracil + mitomycin was administered to patients with advanced gastric cancer. The group who received chemotherapy + human angiotensin II had a significantly greater response rate 31.3% vs chemotherapy alone 6.7%. The human angiotensin II recipients achieved 4 complete and 6 partial responses and the group receiving chemotherapy alone achieved 2 partial responses. There was no significant difference in survival time between the 2 groups/1/.

## DEVELOPMENT HISTORY:

28 Nov 2000 Profile reviewed but no significant changes made  
17 Jul 1998 Profile reviewed by Toa Eiyo  
17 Jul 1998 TY 10721 is now called human angiotensin II  
17 Oct 1994 Launched for Cancer in Japan (IV-infusion)

## REFERENCES

1. Sato H, Wakui A, et al. Randomized controlled trial of induced hypertension chemotherapy (IHC) using angiotensin II human (TY-10721) in advanced gastric carcinoma (TY-10721 IHC Study Group Report). Gan to Kagaku Ryoho. 18: 451-460, Mar 1991. (Japanese). 800074778
2. Sato H, Hoshi M, et al. Phase I study of TY-10721 ((Asp1-Ile5) angiotensin II). Rinsho Yakuri. 21: 731-738, Dec 1990. (Japanese).
3. Sato H, Hoshi M, et al. Phase II study of TY-10721 ((Asp1-Ile5) angiotensin II) in advanced cancer patients for induced hypertension chemotherapy. Rinsho Yakuri. 21: 739-745, Dec 1990. (Japanese).

=> fil reg

FILE 'REGISTRY' ENTERED AT 10:13:20 ON 29 SEP 2004  
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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STRUCTURE FILE UPDATES: 28 SEP 2004 HIGHEST RN 753424-73-6  
DICTIONARY FILE UPDATES: 28 SEP 2004 HIGHEST RN 753424-73-6

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

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Experimental and calculated property data are now available. For more  
information enter HELP PROP at an arrow prompt in the file or refer  
to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> s 4474-91-3 or 13602-53-4 or 39759-50-7 or 85734-57-2 or 129785-85-9 or  
209164-96-5 or 209165-00-4

1 4474-91-3  
(4474-91-3/RN)  
1 13602-53-4  
(13602-53-4/RN)  
1 39759-50-7  
(39759-50-7/RN)  
1 85734-57-2  
(85734-57-2/RN)  
1 129785-85-9  
(129785-85-9/RN)  
1 209164-96-5  
(209164-96-5/RN)  
1 209165-00-4  
(209165-00-4/RN)

*Registry records  
for hits from Toxcenter  
& US PATFULL.*

L67 7 4474-91-3 OR 13602-53-4 OR 39759-50-7 OR 85734-57-2 OR 12978  
5-85-9 OR 209164-96-5 OR 209165-00-4

=> s 210982-24-4 or 227803-63-6 or 51833-78-4

1 210982-24-4  
(210982-24-4/RN)  
1 227803-63-6  
(227803-63-6/RN)  
1 51833-78-4  
(51833-78-4/RN)

L68 3 210982-24-4 OR 227803-63-6 OR 51833-78-4

=> s 19 and (167-168)

L69 10 L9 AND ((L67 OR L68))

=> d cn kwic nte 169 1

L69 ANSWER 1 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN  
CN 1-7-Angiotensin II, 3-L-norleucine-5-L-isoleucine- (9CI) (CA INDEX NAME)

## OTHER NAMES:

CN 38: PN: WO0144270 SEQID: 41 claimed protein  
CN 39: PN: WO0143761 SEQID: 41 claimed protein  
CN 39: PN: WO0155176 SEQID: 41 claimed protein  
CN 39: PN: WO02087504 SEQID: 41 claimed protein  
CN 40: PN: WO0198325 SEQID: 41 claimed protein  
CN 41: PN: WO0056345 SEQID: 41 claimed sequence  
CN 44: PN: WO0002905 SEQID: 45 claimed protein  
CN 7: PN: WO0009144 SEQID: 41 claimed protein  
CN 7: PN: WO9958140 SEQID: 41 claimed protein  
RN 227803-63-6 REGISTRY  
SQL 7

SEQ 1 DRXYIHP

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HITS AT: 1-7

NTE

type	location	description
uncommon	Nle-3	-

=> d cn kwic nte 169 2-10

L69 ANSWER 2 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN

CN Angiotensin III, 2-L-norleucine-4-L-isoleucine- (9CI) (CA INDEX NAME)

## OTHER NAMES:

CN 11: PN: WO0144270 SEQID: 12 claimed protein  
CN 12: PN: WO0002905 SEQID: 12 claimed protein  
CN 12: PN: WO0143761 SEQID: 12 claimed protein  
CN 12: PN: WO0155176 SEQID: 12 claimed protein  
CN 12: PN: WO0198325 SEQID: 12 claimed protein  
CN 12: PN: WO02087504 SEQID: 12 claimed protein  
CN 13: PN: US20030130196 SEQID: 12 claimed protein  
CN 1: PN: WO0009144 SEQID: 12 claimed protein  
RN 210982-24-4 REGISTRY  
SQL 7

SEQ 1 RXYIHPF

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HITS AT: 1-7

NTE

type	location	description
uncommon	Nle-2	-

L69 ANSWER 3 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN

CN Angiotensin II, 3-L-norleucine-5-L-isoleucine- (9CI) (CA INDEX NAME)

## OTHER NAMES:

CN 30: PN: WO0144270 SEQID: 33 claimed protein  
CN 31: PN: WO0143761 SEQID: 33 claimed protein  
CN 31: PN: WO0155176 SEQID: 33 claimed protein  
CN 31: PN: WO02087504 SEQID: 33 claimed protein  
CN 32: PN: US20030130196 SEQID: 33 claimed protein  
CN 32: PN: WO0002905 SEQID: 33 claimed protein  
CN 32: PN: WO0198325 SEQID: 33 claimed protein  
CN 33: PN: WO0056345 SEQID: 33 claimed sequence  
CN 4: PN: WO0009144 SEQID: 33 claimed protein

RN 209165-00-4 REGISTRY  
SQL 8

SEQ 1 DRXYIHPF

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HITS AT: 1-8

NTE

type	location	description
uncommon	Nle-3	-

L69 ANSWER 4 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN  
CN Angiotensin III, 4-L-alanine- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 10: PN: US6762167 SEQID: 18 unclaimed sequence  
CN 11: PN: WO0009144 SEQID: 18 claimed protein  
CN 15: PN: WO0144270 SEQID: 18 claimed protein  
CN 16: PN: WO0143761 SEQID: 18 claimed protein  
CN 16: PN: WO0155176 SEQID: 18 claimed protein  
CN 16: PN: WO02087504 SEQID: 18 claimed protein  
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CN 17: PN: WO0198325 SEQID: 18 claimed protein  
CN 18: PN: US20030130196 SEQID: 18 claimed protein  
CN 18: PN: WO0056345 SEQID: 18 claimed sequence  
CN 22: PN: WO9958140 SEQID: 18 claimed sequence

RN 209164-96-5 REGISTRY

SQL 7

SEQ 1 RVYAHPPF

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HITS AT: 1-7

L69 ANSWER 5 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN  
CN Angiotensin II, 5-L-isoleucine-, dihydrogen phosphate (ester) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 29: PN: WO0144270 SEQID: 32 claimed protein  
CN 2: PN: WO0009144 SEQID: 1 claimed protein  
CN 30: PN: WO0143761 SEQID: 32 claimed protein  
CN 30: PN: WO0155176 SEQID: 32 claimed protein  
CN 30: PN: WO02087504 SEQID: 32 claimed protein  
CN 31: PN: WO0002905 SEQID: 32 claimed protein

RN 129785-85-9 REGISTRY

SQL 8

SEQ 1 DRVYIHPF

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HITS AT: 1-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

NTE modified (modifications unspecified)

type	location	description
modification	Tyr-4	phosphono<PO2>

L69 ANSWER 6 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN  
CN Angiotensin II, 2-L-lysine-5-L-isoleucine- (9CI) (CA INDEX NAME)  
OTHER NAMES:



CN 15: PN: US6762167 SEQID: 23 unclaimed sequence  
CN 20: PN: WO0144270 SEQID: 23 claimed protein  
CN 21: PN: WO0143761 SEQID: 23 claimed protein  
CN 21: PN: WO0155176 SEQID: 23 claimed protein  
CN 21: PN: WO02087504 SEQID: 23 claimed protein  
CN 22: PN: WO0002905 SEQID: 23 claimed protein  
CN 22: PN: WO0198325 SEQID: 23 claimed protein  
CN 23: PN: US20030130196 SEQID: 23 claimed protein  
CN 23: PN: WO0056345 SEQID: 23 claimed sequence  
CN 27: PN: WO9958140 SEQID: 23 claimed sequence  
CN [Lys2,Ile5]-angiotensin II  
RN 85734-57-2 REGISTRY  
SQL 8

SEQ 1 DKVYIHPF

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HITS AT: 1-8

L69 ANSWER 7 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN

CN Angiotensin II, 5-L-isoleucine-8-de-L-phenylalanine- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 11: PN: WO0212471 SEQID: 18 unclaimed sequence  
CN 18: PN: US6610497 SEQID: 18 unclaimed sequence  
CN 3: PN: WO0144270 SEQID: 4 claimed protein  
CN 453: PN: WO0069900 SEQID: 639 unclaimed sequence  
CN 4: PN: WO0056345 SEQID: 4 claimed sequence  
CN 4: PN: WO0143761 SEQID: 4 claimed protein  
CN 4: PN: WO0155176 SEQID: 4 claimed protein  
CN 4: PN: WO0198325 SEQID: 4 claimed protein  
CN 4: PN: WO02087504 SEQID: 4 claimed protein  
CN 4: PN: WO03039434 PAGE: 7 unclaimed sequence  
CN 5: PN: US20030130196 SEQID: 4 claimed protein  
CN 6: PN: WO0018899 PAGE: 18 unclaimed sequence  
CN 8: PN: WO03072059 SEQID: 1 claimed protein  
CN Human angiotensin II (1-7)  
CN [Ile5]angiotensin I (1-7)  
RN 51833-78-4 REGISTRY  
SQL 7

SEQ 1 DRVYIHP

=====

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

L69 ANSWER 8 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN

CN Angiotensin II, 5-L-leucine- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Alanine, N-[1-[N-[N-[N-[N-(N2-L-aspartyl-L-arginyl)-L-valyl]-L-tyrosyl]-L-leucyl]-L-histidyl]-L-prolyl]-3-phenyl-, L- (6CI)

OTHER NAMES:

CN 18: PN: US6762167 SEQID: 26 unclaimed sequence  
CN 23: PN: WO0144270 SEQID: 26 claimed protein  
CN 24: PN: WO0143761 SEQID: 26 claimed protein  
CN 24: PN: WO0155176 SEQID: 26 claimed protein  
CN 24: PN: WO02087504 SEQID: 26 claimed protein  
CN 25: PN: WO0002905 SEQID: 26 claimed protein  
CN 25: PN: WO0198325 SEQID: 26 claimed protein  
CN 26: PN: US20030130196 SEQID: 26 claimed protein  
CN 26: PN: WO0056345 SEQID: 26 claimed sequence  
CN 30: PN: WO9958140 SEQID: 26 claimed sequence

CN 5-Leucine-angiotensin II  
RN 39759-50-7 REGISTRY  
SQL 8

SEQ 1 DRVYLHPF

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HITS AT: 1-8

L69 ANSWER 9 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN

CN Angiotensin III, 4-L-isoleucine- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Alanine, N-[1-[N-[N-[N-(N-arginylvalyl)tyrosyl]isoleucyl]histidyl]prolyl]-3-phenyl- (6CI)

CN Alanine, N-[1-[N-[N-[N-(N-L-arginyl-L-valyl)-L-tyrosyl]-L-isoleucyl]-L-histidyl]-L-prolyl]-3-phenyl- (7CI)

CN Angiotensin II, 1-de-L-aspartic acid-5-L-isoleucine- (8CI)

OTHER NAMES:

CN (2-8)-5-Isoleucine-angiotensin II

CN 1-Des-5-isoleucine-angiotensin II

CN 10: PN: WO0018899 PAGE: 18 unclaimed sequence

CN 12: PN: US20030119021 SEQID: 11 unclaimed sequence

CN 13: PN: WO0069900 SEQID: 662 unclaimed sequence

CN 15: PN: WO0212471 SEQID: 22 unclaimed sequence

CN 18: PN: WO0069900 SEQID: 667 unclaimed sequence

CN 1: PN: US6762167 SEQID: 2 unclaimed sequence

CN 1: PN: WO0144270 SEQID: 2 claimed protein

CN 22: PN: US6610497 SEQID: 22 unclaimed sequence

CN 2: PN: US6022696 SEQID: 3 unclaimed sequence

CN 2: PN: WO0002905 SEQID: 2 claimed protein

CN 2: PN: WO0056345 SEQID: 2 claimed sequence

CN 2: PN: WO0143761 SEQID: 2 claimed protein

CN 2: PN: WO0155176 SEQID: 2 claimed protein

CN 2: PN: WO0198325 SEQID: 2 claimed protein

CN 2: PN: WO02087504 SEQID: 2 claimed protein

CN 3: PN: US20030130196 SEQID: 2 claimed protein

CN 461: PN: WO0069900 SEQID: 647 unclaimed sequence

CN 4: PN: WO03072059 SEQID: 5 unclaimed sequence

CN 5-Isoleucine-angiotensin II 2-8-heptapeptide

CN 5-Isoleucine-angiotensin III

CN 9: PN: WO9958140 SEQID: 2 claimed protein

CN Angiotensin II (2-8)

CN Angiotensin III (human)

CN Angiotensin III (mouse)

CN Des-Asp-5-Ile-angiotensin II

CN Des-Asp1-[Ile5]-angiotensin II

CN Des1-Ile5-angiotensin II

CN Human angiotensin III

CN L-Phenylalanine, N-[1-[N-[N-[N-(N-L-arginyl-L-valyl)-L-tyrosyl]-L-isoleucyl]-L-histidyl]-L-prolyl]-

CN [Ile5]angiotensin III

RN 13602-53-4 REGISTRY

SQL 7

SEQ 1 RVYIHPF

=====

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

L69 ANSWER 10 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN

CN Angiotensin II, 5-L-isoleucine- (8CI, 9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Alanine, N-[1-[N-[N-[N-[N-(N2-L-.alpha.-aspartyl-L-arginyl)-L-valyl]-L-tyrosyl]-L-isoleucyl]-L-histidyl]-L-prolyl]-3-phenyl-, L- (6CI, 7CI)

## OTHER NAMES:

CN 10: PN: WO0212471 SEQID: 17 unclaimed sequence  
CN 11: PN: US20030119021 SEQID: 10 unclaimed sequence  
CN 12: PN: WO0239997 SEQID: 17 unclaimed sequence  
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CN 455: PN: WO0069900 SEQID: 641 unclaimed sequence  
CN 4: PN: WO0101138 PAGE: 8 claimed protein  
CN 5-Isoleucine-angiotensin II  
CN 5-L-Isoleucineangiotensin II  
CN 5: PN: WO0018899 PAGE: 18 unclaimed sequence  
CN 6: PN: WO02087503 SEQID: 6 unclaimed sequence  
CN 7: PN: WO03072059 SEQID: 8 unclaimed sequence  
CN 80: PN: US6017693 TABLE: 4 claimed sequence  
CN 8: PN: WO9958140 SEQID: 1 claimed protein  
CN Angiotensin II (human)  
CN Angiotensin II (mouse)  
CN Human angiotensin II  
CN Isoleucyl5-angiotensin II  
CN L-Phenylalanine, N-[1-[N-[N-[N-[N-(N2-L-.alpha.-aspartyl-L-arginyl)-L-valyl]-L-tyrosyl]-L-isoleucyl]-L-histidyl]-L-prolyl]-  
RN 4474-91-3 REGISTRY  
SQL 8

SEQ 1 DRVYIHPF

=====

HITS AT: 1-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

=> fil reg; d stat que l10  
 FILE 'REGISTRY' ENTERED AT 10:14:25 ON 29 SEP 2004  
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Property values tagged with IC are from the ZIC/VINITI data file  
 provided by InfoChem.

STRUCTURE FILE UPDATES: 28 SEP 2004 HIGHEST RN 753424-73-6  
 DICTIONARY FILE UPDATES: 28 SEP 2004 HIGHEST RN 753424-73-6

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

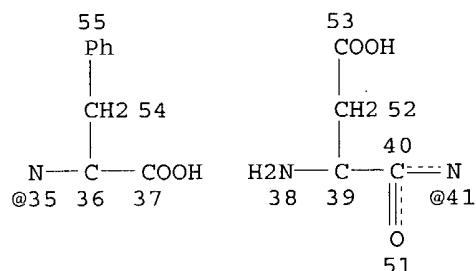
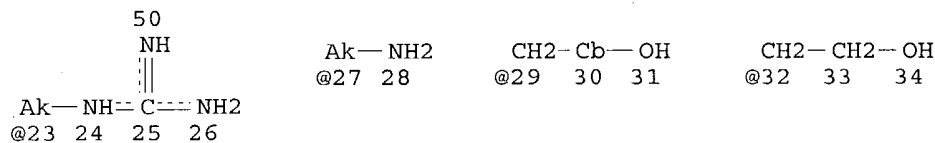
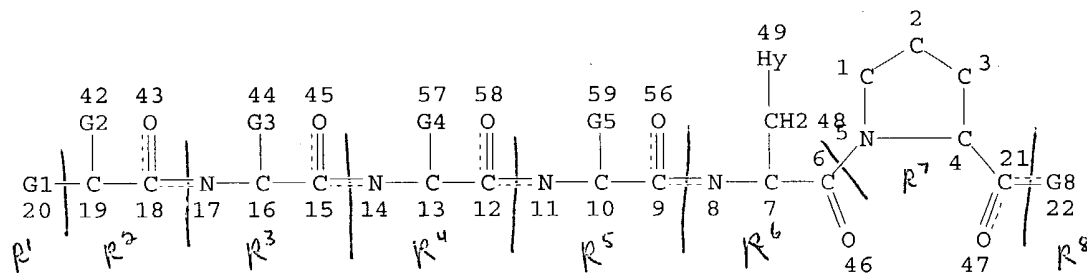
Please note that search-term pricing does apply when  
 conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more  
 information enter HELP PROP at an arrow prompt in the file or refer  
 to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

*structure  
 search of  
 same sequence*

L1 STR



VAR G1=NH2/41  
 VAR G2=23/27  
 VAR G3=I-PR/N-BU  
 VAR G4=29/32  
 VAR G5=S-BU/ME/I-BU  
 VAR G8=OH/35

## NODE ATTRIBUTES:

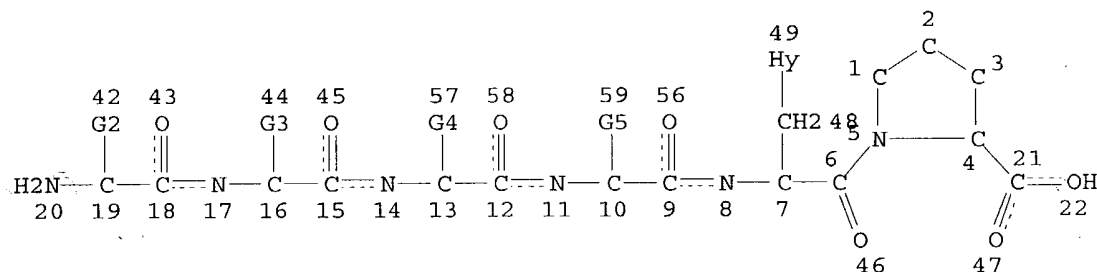
CONNECT IS E2 RC AT 23  
 CONNECT IS E2 RC AT 27  
 DEFAULT MLEVEL IS ATOM  
 GGCAT IS MCY LOC UNS AT 30  
 GGCAT IS MCY UNS AT 49  
 DEFAULT ECLEVEL IS LIMITED  
 ECOUNT IS E3 C E2 N AT 49

## GRAPH ATTRIBUTES:

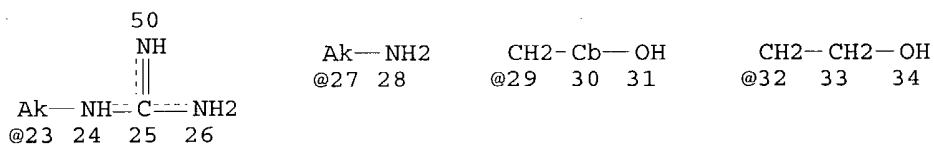
RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 59

## STEREO ATTRIBUTES: NONE

L3 83 SEA FILE=REGISTRY SSS FUL L1  
 L4 STR



*this structure  
 "NOT"-ed out  
 of answer set  
 to eliminate hits  
 w/ 6 aas*



VAR G2=23/27  
 VAR G3=I-PR/N-BU  
 VAR G4=29/32  
 VAR G5=S-BU/ME/I-BU

## NODE ATTRIBUTES:

CONNECT IS E2 RC AT 23  
 CONNECT IS E2 RC AT 27  
 DEFAULT MLEVEL IS ATOM  
 GGCAT IS MCY LOC UNS AT 30  
 GGCAT IS MCY UNS AT 49  
 DEFAULT ECLEVEL IS LIMITED  
 ECOUNT IS E3 C E2 N AT 49

## GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 47

## STEREO ATTRIBUTES: NONE

L6 82 SEA FILE=REGISTRY SUB=L3 SSS FUL (L1 NOT L4)  
 L8 ( 219)SEA FILE=REGISTRY ABB=ON ^D{0,1}[RK][V'NLE'] [Y'HSE'] [IAL]HPF{0  
 ,1}^/SQSP  
 L9 200 SEA FILE=REGISTRY ABB=ON L8 AND SQL>6  
 L10 13 SEA FILE=REGISTRY ABB=ON L6 NOT L9

*removed hits already retrieved w. the  
 sequence search*

=> fil capl; d que nos 172; fil toxcenter; d que nos 177; fil cao; d que nos 182; fil  
 uspatf; d que nos 174  
 FILE 'CAPLUS' ENTERED AT 10:20:23 ON 29 SEP 2004

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FILE COVERS 1907 - 29 Sep 2004 VOL 141 ISS 14  
FILE LAST UPDATED: 28 Sep 2004 (20040928/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

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L1          STR
L3          83 SEA FILE=REGISTRY SSS FUL L1
L4          STR
L6          82 SEA FILE=REGISTRY SUB=L3 SSS FUL (L1 NOT L4)
L8 (        219)SEA FILE=REGISTRY ABB=ON ^D{0,1}[RK][V'NLE'] [Y'HSE'] [IAL]HPF{0
           ,1}^/SQSP
L9          200 SEA FILE=REGISTRY ABB=ON L8 AND SQL>6
L10         13 SEA FILE=REGISTRY ABB=ON L6 NOT L9
L14         130893 SEA FILE=CAPLUS ABB=ON BONE#/OBI OR OSTEO?/OBI
L16         995 SEA FILE=CAPLUS ABB=ON PAGET?/OBI
L23         27565 SEA FILE=CAPLUS ABB=ON BONE MARROW/CT
L30         53 SEA FILE=CAPLUS ABB=ON OSTEITIS/OBI(L)DEFORMANS/OBI
L31         7128 SEA FILE=CAPLUS ABB=ON PERIODONT?/OBI
L47         26127 SEA FILE=CAPLUS ABB=ON ARTHRITI?/OBI
L71         28 SEA FILE=CAPLUS ABB=ON L10
L72         2 SEA FILE=CAPLUS ABB=ON (L71 AND (L14 OR L16 OR (L30 OR L31)
           OR L47)) NOT L23
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FILE 'TOXCENTER' ENTERED AT 10:20:23 ON 29 SEP 2004  
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FILE COVERS 1907 TO 28 Sep 2004 (20040928/ED)

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TOXCENTER has been enhanced with new files segments and search fields.  
See HELP CONTENT for more information.

TOXCENTER thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2004 vocabulary. See <http://www.nlm.nih.gov/mesh/> and [http://www.nlm.nih.gov/pubs/techbull/nd03/nd03\\_mesh.html](http://www.nlm.nih.gov/pubs/techbull/nd03/nd03_mesh.html) for a description of changes.

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L1          STR
L3          83 SEA FILE=REGISTRY SSS FUL L1
L4          STR
L6          82 SEA FILE=REGISTRY SUB=L3 SSS FUL (L1 NOT L4)
L8 (        219)SEA FILE=REGISTRY ABB=ON ^D{0,1}[RK][V'NLE'] [Y'HSE'] [IAL]HPF{0
           ,1}^/SQSP
L9          200 SEA FILE=REGISTRY ABB=ON L8 AND SQL>6
L10         13 SEA FILE=REGISTRY ABB=ON L6 NOT L9
L75         3 SEA FILE=TOXCENTER ABB=ON L10
L76         196573 SEA FILE=TOXCENTER ABB=ON BONE# OR OSTEO? OR PERIODONT? OR
           ARTHRITI? OR PAGET? OR OSTEITIS DEFORMANS
L77         0 SEA FILE=TOXCENTER ABB=ON L75 AND L76

```

FILE 'CAOLD' ENTERED AT 10:20:23 ON 29 SEP 2004  
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FILE COVERS 1907-1966  
 FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

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L1          STR
L3          83 SEA FILE=REGISTRY SSS FUL L1
L4          STR
L6          82 SEA FILE=REGISTRY SUB=L3 SSS FUL (L1 NOT L4)
L8 (        219)SEA FILE=REGISTRY ABB=ON ^D{0,1}[RK][V'NLE'] [Y'HSE'] [IAL]HPF{0
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L9          200 SEA FILE=REGISTRY ABB=ON L8 AND SQL>6
L10         13 SEA FILE=REGISTRY ABB=ON L6 NOT L9
L78         3 SEA FILE=CAOLD ABB=ON L10
L81         6307 SEA FILE=CAOLD ABB=ON BONE# OR OSTEO? OR PERIODONT? OR
           ARTHRITI? OR PAGET? OR OSTEITIS DEFORMANS
L82         0 SEA FILE=CAOLD ABB=ON L78 AND L81

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FILE 'USPATFULL' ENTERED AT 10:20:23 ON 29 SEP 2004  
 CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 28 Sep 2004 (20040928/PD)  
 FILE LAST UPDATED: 28 Sep 2004 (20040928/ED)  
 HIGHEST GRANTED PATENT NUMBER: US6799328  
 HIGHEST APPLICATION PUBLICATION NUMBER: US2004187181  
 CA INDEXING IS CURRENT THROUGH 28 Sep 2004 (20040928/UPCA)  
 ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 28 Sep 2004 (20040928/PD)  
 REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2004  
 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2004

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>>> USPAT2 is now available. USPATFULL contains full text of the    <<<
>>> original, i.e., the earliest published granted patents or      <<<
>>> applications. USPAT2 contains full text of the latest US      <<<
>>> publications, starting in 2001, for the inventions covered in  <<<
>>> USPATFULL. A USPATFULL record contains not only the original  <<<
>>> published document but also a list of any subsequent          <<<
>>> publications. The publication number, patent kind code, and   <<<
>>> publication date for all the US publications for an invention <<<
>>> are displayed in the PI (Patent Information) field of USPATFULL <<<
>>> records and may be searched in standard search fields, e.g., /PN, <<<
>>> /PK, etc.                                                    <<<

>>> USPATFULL and USPAT2 can be accessed and searched together    <<<
>>> through the new cluster USPATALL. Type FILE USPATALL to      <<<
>>> enter this cluster.                                          <<<
>>>                                                                <<<
>>> Use USPATALL when searching terms such as patent assignees,   <<<
>>> classifications, or claims, that may potentially change from <<<
>>> the earliest to the latest publication.                      <<<

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This file contains CAS Registry Numbers for easy and accurate substance identification.

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L1          STR
L3          83 SEA FILE=REGISTRY SSS FUL L1
L4          STR
L6          82 SEA FILE=REGISTRY SUB=L3 SSS FUL (L1 NOT L4)
L8 (        219) SEA FILE=REGISTRY ABB=ON ^D{0,1}[RK][V'NLE'] [Y'HSE'] [IAL]HPF{0
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L9          200 SEA FILE=REGISTRY ABB=ON L8 AND SQL>6
L10         13 SEA FILE=REGISTRY ABB=ON L6 NOT L9
L19         10585 SEA FILE=USPATFULL ABB=ON (BONE# OR OSTEO? OR PAGET?)/IT
L21         2403 SEA FILE=USPATFULL ABB=ON (BONE MARROW)/IT
L33         1069 SEA FILE=USPATFULL ABB=ON (OSTEITIS(L)DEFORMANS OR PERIODONT?)
           /IT
L49         4659 SEA FILE=USPATFULL ABB=ON ARTHRITI?/IT
L73         8 SEA FILE=USPATFULL ABB=ON L10
L74         3 SEA FILE=USPATFULL ABB=ON ((L19 OR L33 OR L49) AND L73) NOT
           L21

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FILE 'CAPLUS' ENTERED AT 10:20:28 ON 29 SEP 2004
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FILE 'USPATFULL' ENTERED AT 10:20:28 ON 29 SEP 2004
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PROCESSING COMPLETED FOR L72
PROCESSING COMPLETED FOR L74
L83         4 DUP REM L72 L74 (1 DUPLICATE REMOVED)
           ANSWERS '1-2' FROM FILE CAPLUS
           ANSWERS '3-4' FROM FILE USPATFULL

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=> d ibib ed abs hitstr 1-4; fil hom

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L83 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1
ACCESSION NUMBER:      2003:836574 CAPLUS
DOCUMENT NUMBER:       139:317472
TITLE:                 Methods, kits and compositions with angiotensinogen,

```



angiotensin or AT2 angiotensin receptors for  
accelerating **bone** and cartilage growth and  
repair  
INVENTOR(S): Rodgers, Kathleen E.; Dizerega, Gere S.  
PATENT ASSIGNEE(S): The University of Southern California, USA  
SOURCE: U.S. Pat. Appl. Publ., 23 pp., Cont.-in-part of U.S.  
6,258,778.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003199434	A1	20031023	US 2001-772819	20010130
US 6258778	B1	20010710	US 1999-352191	19990712
PRIORITY APPLN. INFO.:			US 1998-92653P	P 19980713
			US 1999-130855P	P 19990422
			US 1999-352191	A2 19990712

OTHER SOURCE(S): MARPAT 139:317472

ED Entered STN: 24 Oct 2003

AB The present invention provides improved methods, kits, and compns. for enhancing bone and cartilage repair, bone and prosthesis implantation, and attachment and fixation of cartilage to bone or other tissues; and methods, cell culture medium and kits for chondrocyte proliferation; all of which comprise the administration of an effective amt. of angiotensinogen, angiotensin I (AI), AI analogs, AI fragments and analogs thereof, angiotensin II (AII), AII analogs, AII fragments or analogs thereof or AII AT2 type 2 receptor agonists. AII and AII analog and fragment peptides accelerated rabbit chondrocyte proliferation and accelerated the formation of new bone tissue in rats.

IT 85734-58-3

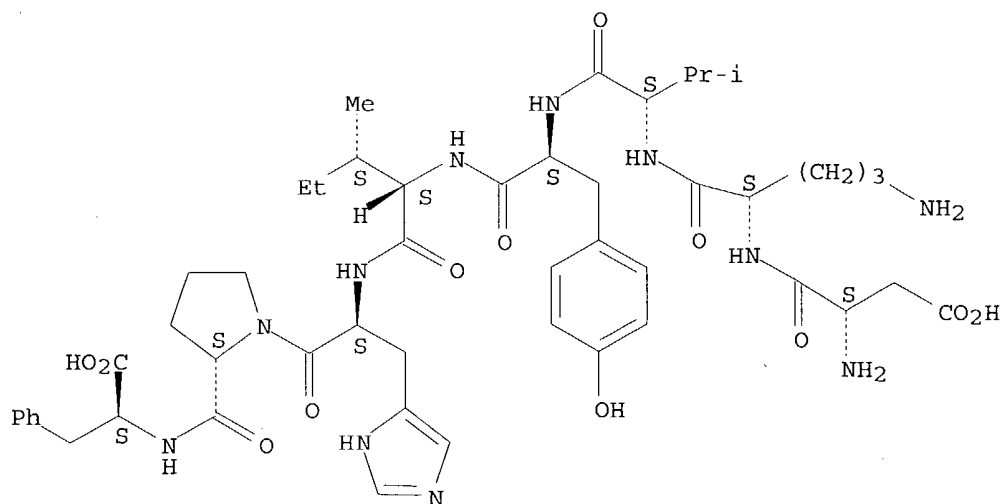
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(amino acid sequence; dangiotensinogen, angiotensin or AT2 angiotensin receptors for accelerating **bone** and cartilage growth and repair)

RN 85734-58-3 CAPLUS

CN Angiotensin II, 2-L-ornithine-5-L-isoleucine- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L83 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:53686 CAPLUS

DOCUMENT NUMBER: 132:103333

TITLE: Methods for accelerating **bone** and cartilage growth and repair using angiotensinogen, angiotensin I and II, their analogs or fragments, or AT2 receptor agonists

INVENTOR(S): Rodgers, Kathleen; Dizerega, Gere

PATENT ASSIGNEE(S): University of Southern California, USA

SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000002905	A2	20000120	WO 1999-US15735	19990712
WO 2000002905	A3	20000224		
W: AU, CA, JP, MX, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2328871	AA	20000120	CA 1999-2328871	19990712
CA 2328871	C	20021001		
AU 9949869	A1	20000201	AU 1999-49869	19990712
AU 756785	B2	20030123		
EP 1094829	A2	20010502	EP 1999-933921	19990712
EP 1094829	B1	20030924		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002520334	T2	20020709	JP 2000-559134	19990712
AT 250423	E	20031015	AT 1999-933921	19990712
ES 2207258	T3	20040516	ES 1999-933921	19990712
PRIORITY APPLN. INFO.:			US 1998-92653P	P 19980713
			US 1999-130855P	P 19990422
			WO 1999-US15735	W 19990712

OTHER SOURCE(S): MARPAT 132:103333

ED Entered STN: 23 Jan 2000

AB The present invention provides improved methods, kits, and compns. for

enhancing bone and cartilage growth and repair, bone and prosthesis implantation, and attachment and fixation of cartilage and cartilage to bone or other tissues, and chondrocyte proliferation comprising the administration of an effective amt. of angiotensinogen, angiotensin I (AI), AI analogs, AI fragments and analogs thereof, angiotensin II (AII), AII analogs, AII fragments or analogs thereof or AII AT2 type 2 receptor agonists.

IT 85734-58-3

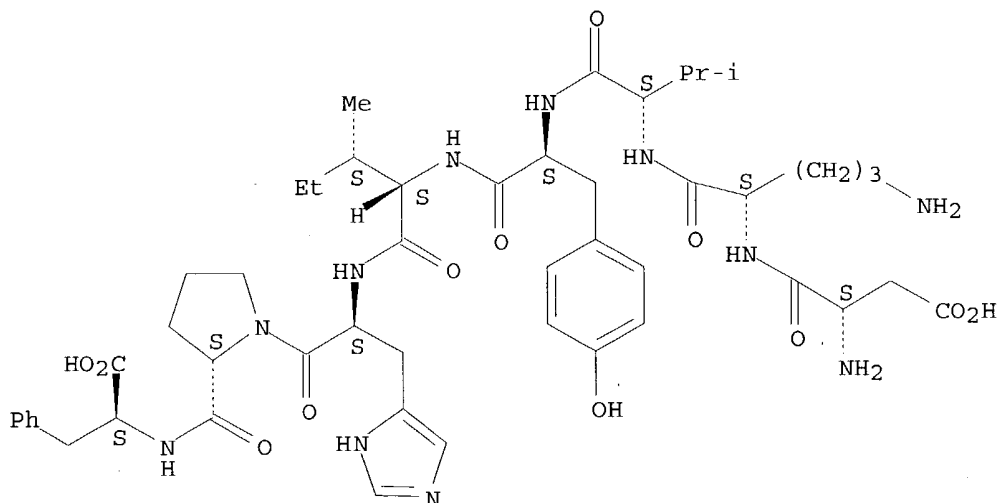
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(methods for accelerating **bone** and cartilage growth and repair using angiotensinogen, angiotensin I and II, analogs or fragments, or AT2 receptor agonists)

RN 85734-58-3 CAPLUS

CN Angiotensin II, 2-L-ornithine-5-L-isoleucine- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L83 ANSWER 3 OF 4 USPATFULL on STN

ACCESSION NUMBER: 2001:107861 USPATFULL

TITLE: Methods for accelerating bone and cartilage growth and repair

INVENTOR(S): ~~Rodgers~~, Kathleen E., Long Beach, CA, United States  
~~DiZerega~~, Gere S., Pasadena, CA, United States

PATENT ASSIGNEE(S): University of Southern California, Los Angeles, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6258778	B1	20010710
APPLICATION INFO.:	US 1999-352191		19990712 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-92653P	19980713 (60)
	US 1999-130855P	19990422 (60)

DOCUMENT TYPE: Utility  
 FILE SEGMENT: GRANTED  
 PRIMARY EXAMINER: Davenport, Avis M.  
 LEGAL REPRESENTATIVE: McDonnell, Boehnen, Hulbert & Berghoff, Harper, David

S.  
 NUMBER OF CLAIMS: 35  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)  
 LINE COUNT: 1595

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides improved methods, kits, and compositions for enhancing bone, cartilage and cartilage repair, bone and prosthesis implantation, and attachment and fixation of cartilage and cartilage to bone or other tissues, and chondrocyte proliferation comprising the administration of an effective amount of angiotensinogen, angiotensin I (AI), AI analogues, AI fragments and analogues thereof, angiotensin II (AII), AII analogues, AII fragments or analogues thereof or AII AT.sub.2 type 2 receptor agonists.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

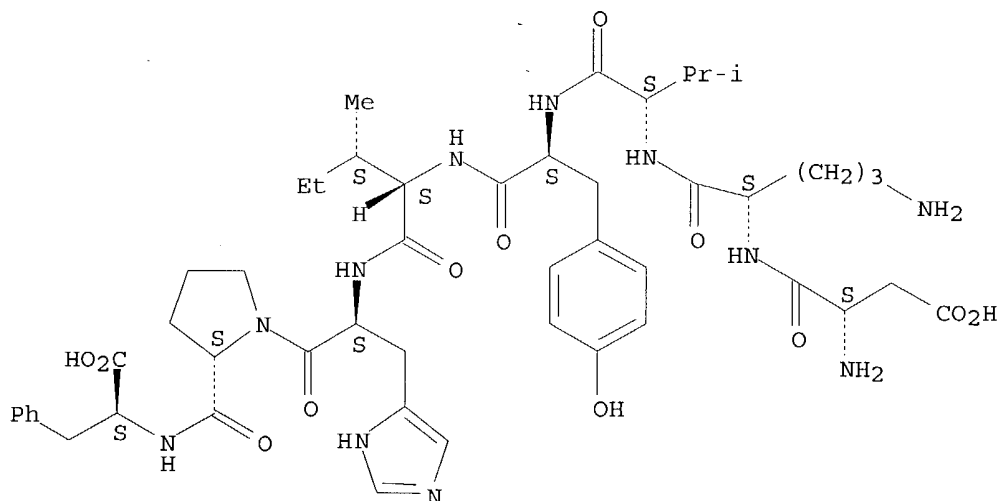
IT 85734-58-3

(methods for accelerating bone and cartilage growth and repair using angiotensinogen, angiotensin I and II, analogs or fragments, or AT2 receptor agonists)

RN 85734-58-3 USPATFULL

CN Angiotensin II, 2-L-ornithine-5-L-isoleucine- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L83 ANSWER 4 OF 4 USPATFULL on STN

ACCESSION NUMBER: 2000:43494 USPATFULL

TITLE: Support apparatus

INVENTOR(S): Larsen, Marilyn M., 15313 Gosford Rd., Bakersfield, CA, United States 93313-9613

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6048253		20000411
APPLICATION INFO.:	US 1998-92653		19980605 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-48684P	19970605 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	

PRIMARY EXAMINER: Hale, Gloria M.  
LEGAL REPRESENTATIVE: Worrel & Worrel  
NUMBER OF CLAIMS: 9  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 3 Drawing Page(s)  
LINE COUNT: 395

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A support apparatus having a main panel constructed of substantially elastic material and dimensioned to be positionable about a portion of the body of a person in supporting relation thereto, such as the protruding region of the abdomen of a pregnant woman; and fasteners operable releasibly to secure the main panel in the supporting relation to provide such support.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

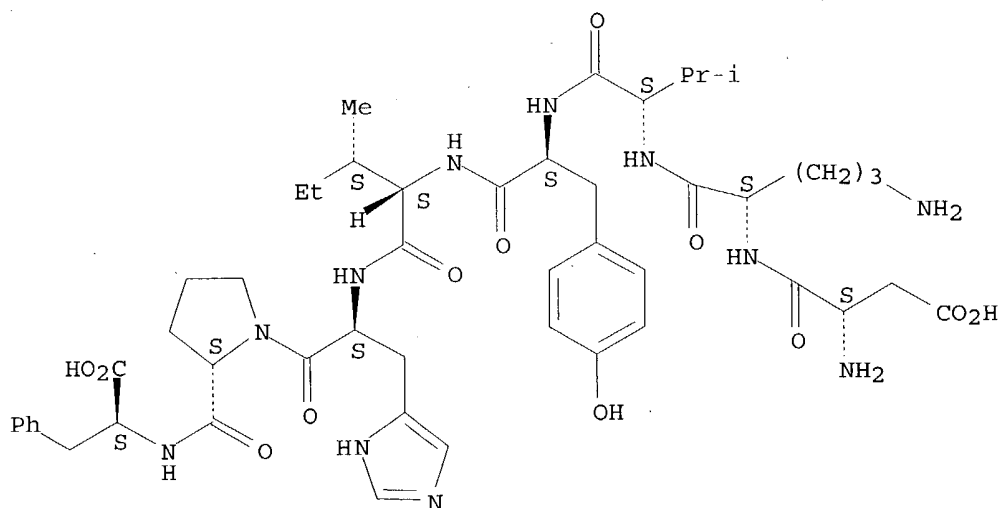
IT 85734-58-3

(methods for accelerating **bone** and cartilage growth and repair using angiotensinogen, angiotensin I and II, analogs or fragments, or AT2 receptor agonists)

RN 85734-58-3 USPATFULL

CN Angiotensin II, 2-L-ornithine-5-L-isoleucine- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



FILE 'HOME' ENTERED AT 10:20:44 ON 29 SEP 2004

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